

**THE
EGYPTIANS**



**1962 - 63
YEAR BOOK**

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HISTORICAL SKETCH

The Egyptians, "a club for the discussion of scientific, religious, economic, and other topics pertaining to the welfare, culture and happiness of the people," was organized at a meeting of fifteen men held in the home of the late A. S. Caldwell on June 21, 1913. These men had been meeting as an unorganized group since 1911. The fifteen founders were: Charles N. Burch, A. S. Caldwell, J. B. Cannon, Elias Gates, Charles J. Haase, E. M. Markham, C. P. J. Mooney, Sanford Morison, J. Craik Morris, A. B. Pittman, J. W. Rowlett, A. Y. Scott, Bolton Smith, B. F. Turner and J. C. Wilson.

Before the organization was completed, fifteen others were enrolled as charter members, namely: Albert W. Biggs, E. C. Ellett, W. H. Fineshriber, J. R. Flippin, Thomas F. Gailor, Marcus Haase, Herman Katz, James P. Kranz, Walter Malone, R. B. Maury, H. Dent Minor, A. E. Morgan, Israel Peres, Alfred H. Stone and Luke E. Wright.

The name chosen for the organization was proposed by W. H. Fineshriber. The fact that ancient Memphis was in Egypt suggested the name. The by-laws stated that the membership should "consist of not more than thirty-three men of recognized standing, ability and influence in Memphis and Shelby County, Tennessee." It was further stated that members were to present their contributions in the form of papers and that all papers were to be issued in printed form. This clause has resulted in the largest and most significant literary production of a general nature ever made by any group of Memphians.

From the beginning, The Egyptians were guarded against internal friction by a constitutional provision that "no resolution shall ever be passed committing the club as a body to any proposition." The club is unique in the unwritten law that its name is not to appear in the press in any connection.

CONSTITUTION AND BY - LAWS

As Amended to May 31, 1960

ARTICLE I.—Objects.

Section 1. The subscribers hereto associate themselves for the purpose of discussing, at stated times and in a social way, such topics as pertain to the welfare, culture and happiness of the people, particularly of our own locality, state or nation. No resolution shall ever be passed committing the club as a body to any proposition.

ARTICLE II.—Name and Membership.

Section 1. This organization shall be known as THE EGYPTIANS, and shall consist of not more than thirty-three regular contributing members, who shall be citizens or residents of Shelby County, Tennessee, of recognized standing, ability and influence in the community, with other associates as provided in Section 2.

Section 2. Honorary membership may be tendered only to non-resident persons distinguished in the walks of education, literature, science or art; and such associates having no votes, shall be exempt from payment of all dues and assessments.

Section 3. Any member may nominate an individual for membership, submitting a brief statement of the candidate's qualifications to the officers of the club. If by majority vote of the officers, the candidate is acceptable, the officers shall circularize these qualifications to the members of the club at least one week prior to the following meeting. A secret ballot shall be cast by mail, with the minimum number of affirmative votes for election equalling at least two-thirds of the total membership, and if not more than two adverse votes be cast by the members, it shall be the duty of the secretary to invite such person to become a member.

ARTICLE III.—Officers.

Section 1. The Officers of the club shall be a President, Vice-President and Secretary-Treasurer, each to be chosen by ballot at the last meeting in May, to serve one year, or until a successor shall be elected.

Section 2. As a compensation for his services, the Secretary-Treasurer shall be exempt from the payment of all dues, charges and assessments.

THE EGYPTIANS

OFFICERS AND MEMBERS

1962-63

Officers

John E. Farrior.....President
Frank Faux.....Vice-President
John F. Moloney.....Secretary-Treasurer

Honorary Members

Dr. Charles E. Diehl
Rabbi W. H. Fineshriber

Members

Otto H. Alderks	Dr. Paul T. Jones
Walter P. Armstrong, Jr.	Dr. A. P. Kelso*
Dr. S. J. Buckman	Ed Lipscomb
Lucius E. Burch, Jr.	Arthur W. McCain
T. Herbert Darnell	John F. Moloney
Dr. John E. Farrior	Clark Porteous
Frank Faux	Dr. Peyton N. Rhodes
Hubert Garrecht	Rudi E. Scheidt
Dr. Henry B. Gotten	Elder L. Shearon, Jr.
A. Arthur Halle, Jr.	Dr. Neuton S. Stern
Wesley Halliburton	Dr. Thomas N. Stern
Frances G. Hickman	Edward F. Thompson
Dr. T. S. Hill	John H. Todd
Dr. Ralph C. Hon	Thomas F. Turley, Jr.
Dr. McDonald K. Horne	C. Lamar Wallis
Dr. C. C. Humphreys	Dr. C. B. Weiss

W. A. Wooten*

*Deceased

LAWS AND SEMANTICS

NEUTON S. STERN

Read before THE EGYPTIANS, Oct. 18, 1962

Webster says semantics is "the science of meaning." The lesson of semantics today is that words have meanings, and that what they mean to one person is not necessarily the same as what they mean to another. The meaning in the course of time and history may change, may gain or lose in overtones and undertones; old significances and uses are lost and new ones originate and develop so that sometimes a word hardly recognizes itself in its old age.

Aldous Huxley has written: "Children should be taught that words are indispensable, but also can be fatal—the only begetters of all civilization, all sciences, all consistency of high purposes, all angelic goodness, and the only begetters at the same time of all superstition, all collective madness and stupidity, all worse-than-bestial diabolism, all the dismal historical collection of crimes in the name of God, King, Nation, Party, Dogma."

What I aim to do this evening is to consider what laws are, how they differ in meaning in changing uses and varying contexts and in what respects, if any, they remain always the same.

Most of us ordinarily think that there is something fixed and sacrosanct about a law, especially that a scientific law, a law of nature, is a part of nature that must be obeyed and that cannot be contraverted. We shall see that this is not the truth; sometimes it is far from the truth, though sometimes near it. But no law is absolutely true.

A great student of the earliest literate civilization, that of Sumer, is named Kramer. He tells us that Hammurabi who began to rule about 1750 B.C. wrote a code of laws, approximately 300 of them, and inscribed them on a diorite stele. But, he says, there came to light recently a law code of King Lipit-Ishtar that preceded Hammurabi by 150 years. Further he relates that soon after this discovery, another code was found in part, the Bilalama codes, promulgated 70

years earlier. This is not the end, or rather I should say the beginning, for since then the code of Ur-Nammu of the third dynasty of Ur has been translated, dating still earlier by about 100 years. This is the oldest set of laws known to man as yet. So that laws are no new things.

Only five of the laws of Ur-Nammu can be "restored with some degree of certainty." Three are particularly important because they show that even before 2000 B.C. the law of, "an eye for an eye and tooth for a tooth" had yielded to a more civilized and humane approval in which a money fine was substituted as a punishment. The fine was 10 silver shekels for a foot cut off, and $\frac{2}{3}$ of a silver mina for a nose(?) cut off.

Ur-Nammu said that the god Nanna made him king, and presumably gave him the power to make laws. The early Egyptian laws were supposed to have been given by the god Thoth. Hammurabi was pictured on the stele as receiving his laws from the sun-god Shamash; some god unnamed gave the Cretan code to Minos on Mt. Dicta; Zoroaster got his from Ahura-Mazda on a high mountain amidst thunder and lightning. Moses therefore is by no means unique, although no other set was so brief and succinct as the Ten Commandments. Even Dionysus has been represented as holding the stone tablets of law.

It is hardly likely that there would have been so many editions if all the gods were as wise as their followers proclaimed them to be. One code should have been good enough and acceptable to all mankind. No, the laws were the codification of local sentiments that had developed among the people for whom they were meant, and we may suppose that before the edicts were formulated, there had been much discussion pro and con about the bad habits and dreadful criminal doings before a consensus was reached.

For our present purpose what is important is that a law was not something inherent in the then social milieu although it arose from this matrix, but was a decree, a pronouncement but not just an ordinary pronouncement. Proposed by the social consensus, it was backed up by the power of the king which was usually absolute in those days. It was a word out of the mouth of a man, and would have been ineffective without his personal physical powers or that of his minions

and soldiers. This was reinforced by stating that the code was the voice and wish of the then-present god.

Every man knew through centuries of history what Louis XIV of France put so briefly and so cogently "L'état, c'est moi." I am the state, meaning without question that "I am the law, and you had better take heed."

Laws by decree were meaningless unless there was power to enforce them. This is true even in the present day. How many would obey the traffic laws, were not the police on the watch for violators? How many would pay their income tax if enforceable penalties were not in the offing for failure to pay? How many would avoid service in the armed forces if there were not powers and penalties to enforce it? Et cetera. Durant has written that the laws of morality and religion, condensed in the Ten Commandments were "destined to receive the lip-service of half of the world."

In respect of law and decree there is slight difference between an absolute tyranny and the democracies of Greece and today. The difference is only where the power lay, in the hands of one man on the one hand, in the hands of the people or their representatives on the other.

A new concept came into the law with the developed work of the Roman jurists. H. J. Muller, in his fascinating book "Freedom in the Ancient World," said these jurists "most clearly transcended tribal and class prejudice by the concepts of *cosmopolis* and natural law . . . Cicero . . . had summed up the premises of natural law . . . the actual laws of nations fall short of justice, but "true law" remained universal, unchanging, and everlasting because it was founded not upon man's opinions but upon nature." The basic idea was equality because of reason, the common possession of man—"law is on the face of it a matter of convention," even natural law. "Men do not in fact agree on a universal, everlasting law"—or on what nature is, or where its laws may be found. In the same way, we and our founding fathers talk of natural right, the God-given rights of man; but these only come into prominence with the philosopher Locke, and were emphasized by the Declaration of Independence and our Constitution!

Where were the rights of man during the three or four thousand years of Egyptian history, or in the Persian Empire,

or in the empire of Alexander? These "rights of man" (so called) are not intrinsic in nature in spite of our glib talk; they hold only in communities that have come to an agreement on this philosophical principle, particularly interesting because this has come about without an edict. They have become commonplace in thought and speech because of a growing sense of equality among Western man, and have resulted in, let us say, a slogan, the rights of man. Among primitive peoples, the only rights that exist are those that have become conventionalized in each social group, and they differ from group to group. Are the millions of Chinese people in their communes prating today of their "rights"?

There is another kind of law that is worthy of temporary consideration—unwritten law. Such law embodies at times an emotional and physical reaction to happenings that contravene the customs of the people. The outstanding example perhaps is the feeling that a man has the right to kill someone who has violated the sanctity of his home and marriage bed. In spite of the written laws against murder, one who has clearly killed for this reason is almost sure to be exonerated by a jury in this country. This "law"—so called—has stood up for a long time and is not apt to be changed in the near future.

These unwritten laws were pointed out by Durkheim in his work on *Anomie*. They are the mark of the mores of the culture in which one lives. They are the result of social pressure and result in the conformism present in every society. The reactions "become habits"; these become "forceful," and change finally into unwritten rules of behavior. Durkheim wrote particularly of pressures that kept individuals in the economic class into which they were born. Classical examples of these strata were the aristocracy, the merchant guilds with masters and apprentices, the serfs, as they existed in the Middle Ages. Another example is the stratification by caste in India. While in the Middle Ages apprentices became masters, other movements from class to class were relatively rare. In our own country this mobility both up and down is greatly accelerated and freer.

As instances of unwritten law in minor degree, men in America use only two kinds of ties; knee pants, wrist ruffles, ostrich feathers on hats are "strictly out." Recently high

school girls wore bobby sox and a college girl going to class would as soon be dead as to be seen with anything but a very dirty pair of white shoes. A clean pair would mark one as *declassée*. Let us now leave this digression into unwritten laws, which change rapidly or slowly according to time, place, circumstances and culture.

Let us now turn to the laws of science. Are they too decrees, or by social consent, or are they absolute and final? Most people today strongly believe that the laws of science are firm and fixed. Sir Isaac Newton was the father of this belief. As a result of his studies the world became a mechanism; the sun and planets followed the laws of gravitation as well as the apple. The laws of mechanics, of physics and chemistry, were definite, and our architecture, our bridges, our steamboats, automobiles and airplanes, our chemical industry, our prognostication of eclipses are founded upon the precision and accuracy of these "laws."

Did Newton discover these laws ready-made in some hiding places in nature, or did he make them up himself? If not out of whole cloth then of what?

In the early days before science was science, man used if not whole cloth at least part cloth. The god Indra rode the storm; Aeolus, King of the Winds told his sons, the winds from north, south, east and west, when and where to blow, and when to stop. Vegetation died when Attis or Adonis or Osiris died, and grew again in the spring when he was resurrected—although the ancients knew perfectly well what to do with seeds. They saw no incompatibility, because they did not know enough to see it. But even in this climate of thought, Greek logic began, with understanding of induction and deduction.

When man began to use his powers of reason on the happenings he saw about him, when observations and not myths became the basis of his thinking, he began to generalize from them and to state his conclusions; although he did not call his conclusions laws at this stage of development, he did call them axioms and propositions, the axioms being so "self-evident" that they didn't need to be proved (and couldn't be proved anyway). So Euclid, that great codifier of the geometry of his day, who wrote the first early work of its kind to be preserved (though obviously the Egyptians of the

Pyramids were fine geometers)—so Euclid said a straight line is the shortest distance between two points. That was that, until he changed his premises and talked about spherical surfaces instead of plane surfaces. Then the shortest distance between two points, as any aviator knows, is the curved portion of the great circle that touches them both. There are *always* the limitations of the context in which the premises are stated, and so these conclusions are not universal and always so.

As time went on and so many points were classified, the conclusions and the terms in which they were expressed, because more and more precise, and finally in their exact form were called laws, the laws of nature and science. These laws were tested by their accuracy in prediction; they said that things should happen according to their rules. Man set up experiments of various kinds, not only those from which the conclusions were drawn in the first place, but others to see whether under changed conditions the law would hold good. If all work confirmed it, the law was confirmed; if not, it was either changed to incorporate the new and similar results or entirely changed or discarded.

At one time it was thought that in combustion, phlogiston was driven off from a burned substance. Even after it was shown that many substances when burned gained weight instead of losing it, it took many years before men agreed that the gain in weight was due to the addition of oxygen, rather than to the subtraction of phlogiston. In the end the "law of combustion" was absolutely reversed.

When I was in college we thought that the subject of matter was a closed book: matter, molecules, atoms, particles to which electrons, the "substance" of electricity were attached. We did know about radium, but not about its implications and what has since developed from it. There has been a complete revolution in this half century. Matter is now believed to be composed of thirty, perhaps forty, particles of energy; and further, matter and energy change back and forth from one to the other according to the formula of Einstein, $E=Mc^2$, which is the basis of our present dealings with atomic energy.

Until the Einsteinian period, there seemed much certainty in the laws that were promulgated by science. It was a tremendous jolt to scientific and worldly self-complacency when

Werner Heisenberg came forth with his "principle" of uncertainty or indeterminacy. By now he knew better than to call it a law. This principle says that we cannot specify at the same time the position and speed of an electron with absolute precision. Sir James Jeans says in "The Mysterious Universe" that this is in part due to the clumsiness of the apparatus at our disposal, and in part, according to the quantum theory, due to the fact that nature moves by jumps or jerks in the minuscule world of matter. "So long as these jerks are of finite size, it is as impossible to make exact measurement as to weigh oneself exactly on a balance which can only move by jerks." The determinism which seems to us to occur is only statistical.

Is this the end? Is there nothing left for the future? I think not. We are probably in the adolescence of science, not its old age. We will go on from new principle to new principle.

We see then that science is based on reason. Observing a common quality, a regularity of behavior of the phenomena of nature, under given conditions, a scientist makes an induction, passes from detail to a generality, and calls it a theory—or perhaps a law. From this he reasons that certain other details should happen; he makes a deduction, he predicts effect. Then he makes experiments and so long as things happen in accordance with the predictions, the law holds. So far none of the scientific laws of the past have held in their entirety. Scientists no longer believe that any of the present laws are final; they consider them tentative and mutable. No longer are axioms held to be self-evident. Scientists now start from assumptions.

We can now answer our initial questions. No law of any kind, whether it be religious, social, psychological or scientific, no law is absolute, no law is true in the full and everlasting sense of that word. Laws of every kind are man-made, subject to the errors, the pre-suppositions, the passions, or inadequacies of thought that went into their origination and construction. Being of human development and liable to human mistakes, all laws are in some degree imperfect, incomplete and therefore essentially tentative.

CUBA

Failure of American Foreign Policy

JOHN F. MOLONEY

Read before THE EGYPTIANS, November 15, 1962.

Cuba today provides a close-to-home graphic example of what Communism does to a country. Prior to Castro, only two Latin American nations—Costa Rica and Venezuela—enjoyed higher per capita income than Cuba. Under Communism, income per person has declined more than 40 percent.

Workers' pay, in both industry and agriculture is down sharply. Premium pay for overtime, paid vacations, Christmas bonuses and other benefits have been eliminated.

Cubans now eat about half as well as they did before Castro. Food is strictly rationed. Meat consumption is down from 7.5 lbs. per person per month to 3 lbs. Rice consumption has dropped from 10 lbs. to 6 lbs. monthly per person and bean consumption is now about 1.5 lbs. monthly per capita, a decrease of 40 percent.

Approximately 45 percent of the rolling stock on Cuba's railroads is out of commission. In 1958, there were 1,040 buses operating in Havana. In January of this year, the number was down to 670. In 1958, there were 19,700 tractors in Cuba. Now, only 13,950 are reported in working order.

In 1958, also, Cuba was nearing self-sufficiency in petroleum products, with British and U. S. firms expanding their refineries. Castro seized these plants and has been trying to operate them on crude oil from Russia. The plants are badly run down, production is off sharply and, despite the decline in the number of buses, trucks and other oil-consuming equipment, there is a serious shortage of gasoline and other petroleum products.

The Castro government confiscated more than \$1 billion of American investments in Cuba. It has stolen even more from the Cubans themselves. All rental property and the

homes of Cubans who fled were seized. Fully half the island's land has been placed under government ownership. Castro promised homes for industrial workers and farms for agricultural laborers but, with a few exceptions used as showpieces for propaganda purposes, these promises have never materialized. A large proportion of Cuba's farm workers have been placed on state farms. These workers are paid primarily in scrip which is redeemable only at government-owned "peoples' stores." In the cities, housing is so short that Castro has advised young people not to marry unless they can move in with their in-laws.

So much for the material blessings of the "workers' paradise." What of personal, intellectual and political freedoms?

Like every communist regime, Castro's government permits no opposition. Only one party, the Integrated Revolutionary Organization, is allowed to operate. Free elections, one of Castro's major promises before and after he came to power, have never been held and are now called "a vice of the capitalistic world to keep imperialists in power."

The free press has been destroyed. The semi-official newspaper, *Revolucion*, and the communist daily, *Hoy*, provide Cubans with their printed news. Of the five TV stations operating prior to Castro, only one is left and that operates under complete government control. American films have been banned.

All schools, public and private, have been nationalized and the entire educational system has been changed to one of communist indoctrination. Textbooks preach the party line which includes hatred of capitalism and of the United States. The University of Havana is headed by Juan Marinello, a long-time leader of the Cuban Communist Party. Thousands of young Cubans have been sent to study behind the Iron Curtain.

Religion is being slowly stifled. Priests may perform the rites of the church but are prohibited from teaching the catechism and from engaging in social work.

Personal freedom no longer exists. A home may be searched without a warrant. A person may be arrested and imprisoned without a charge. Habeas corpus is not recognized,

and the accused is considered guilty unless proven otherwise. The government has an elaborate system of spies and secret police. Castro himself has boasted that he has one spy for every six Cubans. Under Batista, there were about 10,000 political prisoners. Castro is holding 50,000 to 70,000. He admits to 670 executions, but reliable diplomatic sources estimate that several times that number have been murdered by the regime.

This is communism—90 miles from our borders. How it came about and how the United States government has reacted to it represents one of the less illustrious pages in the history of our nation.

II

Cuba is the largest island in the West Indies. Its area of 44,217 square miles is slightly larger than the State of Tennessee. The population of about 6 million is three-fourths white, with the balance Negro or a mixture of Negro and white. Some 70 per cent of the people live in rural areas and agriculture is the major occupation. Sugar is the dominant crop with tobacco in a secondary role. Cuba's climate is mild and its soil generally fertile. Deposits of copper, nickel and iron ores are available. A number of exceptionally fine harbors characterize the Cuban coast. The island's resources are adequate for the development of a prosperous economy.

Like most of the Latin American nations, Cuba has had a turbulent history. It was one of the first parts of the Western hemisphere discovered by Columbus in 1492 and it remained under Spanish rule for more than four centuries. The Spaniards early recognized the economic potential of the island and its great strategic importance.

As most of us have come to realize during recent years, Cuba lies just 90 miles southwest of Florida. Perhaps not so well known is the fact that it is only 135 miles northeast of Mexico's Yucatan Peninsula, 93 miles north of Jamaica and 60 miles west of the island that is made up of Haiti and the Dominican Republic. The entrances to the Gulf of Mexico and the Caribbean Sea can be effectively controlled—by sea and air—from bases in Cuba. In today's age of jets and

missiles, Cuba is of even greater importance to the security of the United States than in any previous period.

The importance of the island to this country was well-recognized throughout the 19th century. Concern over Cuba was, in fact, one of the principal factors involved in the adoption of the Monroe Doctrine. There were many, including John Quincy Adams and Thomas Jefferson, who believed that Cuba should become one of the States of the Union. Generally, however, the United States was agreeable for Cuba to remain a possession of Spain, a nation too weak to be a threat to this country.

Spanish colonial policy was not notable for its enlightenment. Corruption was widespread, cruelties were common and revolts, a number of them organized within the United States, were frequent, though unsuccessful. In 1895, however, there began a struggle that was to lead, a few years later, to Cuban independence. It was bitterly waged by both sides and a substantial element of the American press, emphasizing and sensationalizing Spanish cruelty, took up the torch for Cuban independence and American intervention. The McKinley Administration at first resisted the effort to involve the United States in armed conflict and, for a time, was successful. Early in 1898, however, the U. S. battleship "Maine" was sent to Havana to provide at least a symbol of protection for American lives and property. Shortly after its arrival, the "Maine" was blown up with the loss of 264 American seamen. Whether the ship was sunk by accident, by the Spanish or by the Cubans, it served as the spark for the declaration of war.

The war lasted only four months. Spanish military and naval forces were decisively defeated in both Cuba and the Philippines. Under the peace treaty, it was agreed that Cuba should become independent after a period of trusteeship by the United States. During this period which lasted from 1898 to 1902, the American military government did an outstanding job of transforming Cuba from a condition of complete chaos to a position of stability and in establishing the basis for sound economic development. A constitution, patterned in many respects after that of the United States, was drafted and adopted by the Cubans, themselves. Included in

that constitution, upon the insistence of the United States, was the so-called Platt Amendment.

This often-criticized section, which was also contained in a treaty with the United States, carried the following major provisions:

1. That Cuba would enter no treaty or other agreement with any foreign power that would impair Cuban independence or give to a foreign power "lodgement in or control over any part of the island."
2. That the Cuban government would contract no debts which it could not reasonably pay.
3. That the United States had the right to intervene at any time that the Cuban government was unable to maintain the island's independence or to protect life, individual liberty and property.

In the light of developments during the sixty years since Cuba became independent, the understanding and the foresight of the United States Senators who, with the support of Secretary of State Elihu Root, insisted upon adoption of the amendment, seems quite remarkable. Cuba's first government took office in 1902 under President Estrada Palma. It is quite widely agreed that it was probably the best government Cuba has ever had. Under honest administration, the Republic made real progress in both domestic and foreign affairs.

At the end of his first term, Palma was re-elected, but his opponents, who had organized as the Liberal Party, charged fraud and initiated a revolt. After several months of disorder and upon requests from both sides, the United States—quite reluctantly—moved back into Cuba in 1906. Order was restored, election machinery was completely overhauled and both local and national elections were held in 1908. Early in 1909 the United States again withdrew, leaving Cuba to govern herself.

This Cuba has seemed unable to do. A Negro uprising in 1912 and another Liberal election-protest revolt in 1917 brought brief American intervention on both occasions. In 1919, the Cuban government invited General E. H. Crowder, U. S. Army, who had served effectively in Cuba

from 1906 to 1909, to draft a new election law. General Crowder also served from 1921 to 1923, as a special representative of Presidents Wilson and Harding, to advise the Cuban government on financial and administrative matters.

Except when the United States moved in and took complete control of Cuba, however, intervention on a limited scale accomplished little. In his excellent *History of the Cuban Republic*, Professor Charles E. Chapman states, "Politics is one of the least amiable phases of the Hispanic heritage. It was bad enough under Spain. One may well raise the question whether it has not been yet worse under the republic. . . ." Down through 1925, Cuban politics were dominated by two parties—Liberal and Conservative. There was little difference between them. Chapman points out that it is a Cuban tradition that government exists ". . . for the benefit of the office holders who must be expected to miss no reasonable opportunity to improve their own fortunes at the expense of the state." This has been true regardless of the party in power. Some of the methods used by the politicians, including murder when necessary, and the extent to which they have robbed the Cuban people appear fantastic. Corruption has permeated the legislative, executive, and judicial branches of the national government and the provincial and local governments as well. In the early 1920s, for example, it was estimated that 15% of the revenues and 25% of the disbursements of the national government were lost to graft. A comparable degree of corruption applied to elections. In fact, it can be stated that a majority of Cuba's presidents have been elected fraudulently.

Before we become too smug, however, let us not forget that we have had our own Teapot Dome affair, deep freezes and fur coats in the White House and more recently the Billie Sol Estes case, including the unexplained death of one of those deeply involved and the arbitrary commitment of one witness to a mental institution. And we may well ask ourselves whether the candidate who promises special favors to minority groups—whether they be union labor, the aged, the negroes, farmers or others—in return for votes is living by any higher moral standard than one who simply dips his

hand into the public treasury and removes whatever he can.

III

In 1924, General Gerardo Machado, candidate of the Liberal Party, was elected President. He took office in 1925 with a pledge that he would not seek re-election. Technically, he kept that pledge for, in 1928, he induced Congress to adopt a constitutional change which gave him a second term—of six years—without an election.

Machado built a strong dictatorship which he maintained by control of the army. Discontent, centering in a number of revolutionary organizations that had their roots at the University of Havana, flared occasionally into revolts that were vigorously suppressed. In 1933, however, Sumner Welles was named by President Roosevelt as United States Ambassador to Cuba. Welles subscribed to the Liberal theory that all "right-wing" dictatorships must be destroyed and replaced by "democratic" governments, regardless of whether the people involved have demonstrated, to any degree, the maturity necessary to maintain such a government. He promptly set to work to oust Machado. American intervention was strongly hinted and this so disturbed the Cuban army that its leaders demanded and obtained Machado's resignation in August, 1933. The fall of Machado marked the beginning of several years' chaos in Cuba. While the army had supplied the direct leverage that ousted Machado, it had no desire to take over the government. Military leaders wanted a civil, not a military government, and they gave the politicians every opportunity to establish one. Even after the "sergeant's revolt" and the ascendancy of Sergeant Fulgencio Batista to Army Chief of Staff, the military waited several years before they moved for complete control. During this period from 1933 to 1940, Cuba had seven presidents, only one of whom was elected. The term of one of these presidents lasted 32 hours.

The revolutionary organizations kept the nation in a constant turmoil. Their sole objective was control of the national government and of the jobs and graft that went with it. This control shifted from one group to another, but none of them were able to maintain a stable government. Bombings,

shootings, riots and strikes were almost continuous. Only the periodic intervention of the military under Batista prevented complete anarchy. It was during this period—in 1935—that the United States, in line with the Liberal concept that we must do absolutely nothing to offend the “sensibilities” of other nations, proposed and effected the annulment of the Platt Amendment. This action was strongly opposed by the more stable and intelligent elements of Cuban society. It was, of course, highly popular among the revolutionary groups, including the communists, and among American Liberals.

Communist organization in Cuba had its start during the 1920's and under the disordered political conditions that prevailed, it spread rapidly, especially among the labor unions. By the mid-1930's, communists controlled the Confederation of Cuban Workers and headed every major union in Cuba. Communists held posts in the cabinets of several of the series of governments that followed Machado and were, to a large extent, responsible for the unrest and disorder that were so widespread.

In 1939, Batista retired from the army and announced as a candidate for President on a highly liberal platform. He was elected with the support of the Nationalist, Liberal, National Democrat and Communist parties. As described by Ruby Hart Phillips, staff correspondent of the *New York Times*, “Polling was comparatively orderly. Only six persons were killed and forty wounded during the day.”

Batista's presidency was marked by a minimum of internal disorder. A few days after Pearl Harbor, Cuba declared war on the axis nations and Batista was granted broad emergency powers. While he ruled with a strong hand, his administration was much removed from the popular picture of a ruthless dictator. Some communists served in his cabinet. Relations with the United States were generally good. As the elections of 1944 approached, Batista declined to run for reelection and Dr. Grau San Martin, a professor at the University of Havana, was elected on a platform that emphasized lavish spending and hatred of American capitalism. His administration was characterized by the expropriation of foreign-owned businesses, large-scale graft and widespread inefficiency. Disorder flourished.

Grau San Martin was succeeded as president in 1948 by

Dr. Prio Socarras, a long-time revolutionary, also from the University of Havana. Socarras' administration was largely undistinguished. Unrest and disorder, much of it communist-inspired, increased despite generally prosperous conditions.

The election campaign of 1952 got under way with three candidates, one of whom was former President Batista. A couple of months before the election, Batista, with the support of the army, seized control of the government. As previously, he ruled with a strong hand, restored order, set regular elections for November 1, 1954, and announced his candidacy.

One of the opposition parties refused to participate. Former President Grau San Martin, the only other candidate, withdrew one day before the election and Batista was again elected president. He remained in office until ousted by Fidel Castro in 1959.

IV

Fidel Castro was born in Oriente, Cuba's eastern-most province, in 1926. He was the illegitimate son of a moderately wealthy owner and operator of a sugar plantation. After a turbulent home life, he entered the University of Havana in 1945. There is creditable evidence that he was already a member of the communist apparatus operating in Havana. In any event, he associated himself with the communist group at the University promptly after his arrival.

Castro's first prominent role as a communist revolutionary took place not in Cuba but in Bogota, Colombia. The Ninth Inter-American Conference was scheduled for that city in 1948 and the communists saw in that occasion the opportunity to demonstrate their power in the western Hemisphere. They organized an uprising which they hoped would result in the overthrow of the Colombian government, the break-up of the conference and the murder of Secretary of State Marshall, the chief United States delegate. Actually, it came very close to realizing all three objectives. The uprising was suppressed only after several days of bloody rioting, many deaths and widespread destruction.

There is ample and voluminous documentation of Castro's part in the Bogota riots and of the fact that these riots were communist planned and led. Such evidence is contained in the

published reports of the Colombian National Police, in the press of Colombia and other Latin American nations and in a UP dispatch to this country, dated April 19, 1948. In a nationwide radio address following the uprising, Colombian President Perez denounced Castro as one of the communist organizers of the insurrection. Yet, as late as 1960, the United States State Department was insisting that Castro and his revolution were not communist-oriented.

Castro escaped arrest in Bogota by taking refuge in the Cuban Legation which later arranged to have him flown back to Cuba. There, he entered politics and rose to a position of some importance in the Cuban Peoples' (Orthodox) Party. He was one of the party's nominees for Congress when Batista took over the government in 1952. While Batista, during his first term of office, had worked with the communists, he now turned strongly anti-communist. Thus, it was quickly evident to Castro that he had no future as long as Batista was in power.

Castro's next major venture started as a plot to assassinate Batista at a patriotic rally in Santiago. When Batista changed his plans and did not attend the rally, the communists decided to direct their attack upon the Moncado Army Barracks also at Santiago. This attack was staged on July 26, 1953—from which date the Castro revolutionary movement took its name. Raul Castro, who had received training in guerilla warfare behind the iron curtain, took part in this venture. The attack was unsuccessful and it brought strong repressive measures by the Batista government. Both Castros were apprehended and convicted of murder. Fidel was sentenced to 15 years and Raul to 13 years. However, both were released after serving only 22 months.

Shortly after their release in 1955, the Castro brothers went to Mexico where they promptly made contact with the Soviet apparatus for Latin America, which has headquarters there. In Mexico, the Castros proceeded to assemble recruits for an armed invasion of Cuba. During 1955 and 1956, Fidel Castro visited the United States several times, making speeches and raising funds.

In November, 1956, Castro and 82 men left Mexico by boat for Cuba. When they landed, they were met and practically

wiped out by the Cuban army. Only Castro and 11 others survived to reach the mountains, where he based his future operations.

If Castro and his small band had been dependent solely upon their own resources, it is probably that little more would have been heard of them. But Castro was a part of the international communist movement. Support for him appeared in the form of arms and money. Money was particularly important. First, it enabled Castro to buy arms in the United States. Second, Batista had permitted the army to decline to an extremely low level of efficiency and Castro was able to bribe and buy large numbers of troops. After two years of sabotage and guerilla attacks, the Cuban army practically disintegrated. No full-scale battles were fought in the takeover of the government.

Castro had another highly important weapon—propaganda. Within two months after he landed in Cuba, Herbert Matthews of the *New York Times* made a special trip to interview him. The result was a series of highly laudatory articles, which presented Castro in a Robin Hood role, that gave the Castro movement world-wide recognition and stature. Other "newshawks" soon followed Matthews' trail. Robert Taber of CBS News interviewed Castro in his mountain hideout, as did Ed Sullivan, and Edward R. Murrow staged one of his "documentaries," highly praising the Castro movement. All this publicity created in the United States a highly distorted view of Castro and his intentions.

The policies followed by the State Department in our relations with Cuba corresponded closely to the line of publicity appearing in the press and on radio and television. It is difficult to determine whether the communications media followed the lead of the State Department or vice-versa. It is known that every warning or suggestion that the Castro movement was communist was ignored or suppressed within the Department, while great emphasis was placed on the alleged corruption and cruelties of the Batista regime. Ambassador Arthur Gardner, who served in Havana from 1953 to 1957, repeatedly advised his superiors, in the Latin American section of the Department, of Castro's communist orientation. He was forced to resign. Gardner testified before the Senate

Internal Security Subcommittee that the attitude of the State Department was the principal factor responsible for the overthrow of Batista and the ascendancy of Castro.

Earl Smith succeeded Gardner as Ambassador to Cuba, serving from 1957 to 1959. In his testimony, also before the Senate Internal Security Subcommittee, Smith stated: "The Batista government was overthrown because of the corruption, disintegration from within, and because of the United States and the various agencies of the United States who directly and indirectly aided the overthrow of the Batista government and brought into power Fidel Castro . . . Without the United States, Castro would not be in power today."

V

It took about a year and a half, after Castro came to power, before it was possible to reverse United States policy of support for his government. During that period, the American people were exposed to one of the most intense propaganda campaigns they have ever experienced. Press, radio, television and the magazines seemed to be trying to outdo each other in extolling the Castro regime. The book publishers—even "reputable" ones—got into the act with such blatant propaganda pieces as "Listen Yankee" by C. Wright Mills, "Cuba: The Anatomy of a Revolution" by Huberman and Sweezy, and "90 Miles from Home" by Warren Miller. The Fund for the Republic issued an "occasional paper" which contained this gem, "It would be foolish not to realize that what Castro initially created in the Cuban Revolution was a veritable Sermon on the mount, at which one cannot sneer. Who can be against a creed that reads: Distribute the land, give to the poor, educate the unlettered, care for the sick, share the wealth, make public what is private, make the stranger's your own, raise up the humble and level the proud."

The Fair Play for Cuba Committee, financed with Cuban government funds, was organized by Robert Taber of CBS News. This front made considerable progress, especially in the colleges, until Taber, having perjured himself before the Senate Internal Security Subcommittee, fled to Cuba. He was succeeded as head of the front by another CBS newsman,

Richard Gibson, who spent most of his time before the Subcommittee pleading the 5th Amendment.

Slowly, in the light of disclosures by the Senate Internal Security Subcommittee and the prodding of inescapable facts, a reversal of policy began to take shape. In mid-1960, the proposal for an invasion of Cuba was made. It came from the Cuban refugee group. While no commitment was made, responsibility for planning such an invasion was assigned to the Central Intelligence Agency, with deputy director Richard Bissell in charge.

Training camps for volunteers were set up in Guatemala. The Defense Department made available instructors and supplies, as requested by the CIA. Included were some obsolete B-26 bombers and troop carrier planes from World War II. President Eisenhower personally reviewed the plan on several occasions and it was well understood that success would require control of the air. In view of the arrival of Soviet jets in Cuba, this meant American air power. It was also clearly recognized that American troops, to supplement the Cuban volunteers, might be necessary.

Late in 1960, it became apparent that the new Administration would take office before it would be possible to get the invasion under way. Between his election and inauguration, Mr. Kennedy was briefed several times regarding progress of the project. Promptly after taking office, he called upon the Joint Chiefs of Staff for a "feasibility opinion" of the project. In view of the later efforts to place the blame for failure upon the Joint Chiefs, it is important to note that the military were never given primary responsibility for the operation and that the new President asked the Joint Chiefs *only* for a technical evaluation. With the understanding that American airpower would be available and that American troops might have to be used, the Joint Chiefs rendered a favorable evaluation of the plan. In late January, 1961, the President authorized the CIA to proceed.

Almost immediately, however, some of the President's closest advisers began a campaign that eventually resulted in the project's failure. This was based upon the theory that it was "immoral" for the United States to engage in such a program of "aggression," either masked or open, and that it

would have a disastrous effect upon this country's posture in the "court of world opinion." Chief proponents of this theory were Secretary of State Rusk, Adlai Stevenson, Chester Bowles, and Senator Fulbright whose support, as chairman of the Senate Foreign Relations Committee, the President was most anxious to have.

This opposition to the straightforward, effective prosecution of the project resulted in a series of tragic—indeed almost fantastic—decisions. The President ruled, first, that U. S. airpower would not be made available and, second, that the old B-26s could be used for only two strikes against Castro's air force—one two days before the invasion and the other on the morning of the landing. One week before the embarkation, at the insistence of the State Department, the landing area was moved about 100 miles to the Bay of Pigs which in many ways was less desirable than the original target. Arrangements that had been made to arouse the Cuban populace and to try to confuse the militia by leaflet raids and broadcasts were cancelled. Shortly before the expedition embarked, the President announced at a press conference that the U. S. would not intervene with force in Cuba. Secretary Rusk repeated the same assurance on the morning of the invasion, thereby notifying Cubans in Cuba that they could expect no help from us.

At noon on Sunday, April 15, with the invasion force just 11 hours from landing, the President gave his final and somewhat reluctant approval. He was spending the weekend in Virginia and turned the matter over to Secretary Rusk. That evening, CIA officials responsible for the project received a call from Presidential Assistant McGeorge Bundy, stating that the B-26s, whose first attack the day before had been quite successful, were not to attack on the following morning. This order was issued by Rusk. CIA officials went to the State Department and pleaded with the Secretary to reconsider the decision which they believed doomed the expedition. In refusing to do so, Rusk made it quite clear that political considerations were overruling the military necessities.

At 4 o'clock the following morning, CIA men again went to Rusk to ask that planes from the USS Boxer, which was nearby, be allowed to protect the invasion ships while they

were in international waters. Rusk again refused and the CIA officials asked to talk to the President. He was awakened and the serious situation explained to him. His answer was "No."

Shortly afterward, the invasion force landed. They never had a chance. Castro's remaining jets sunk the ships carrying the bulk of the ammunition and supplies and his tanks and artillery cut the invaders to pieces. The complete mismanagement of a military operation by politicians had brought about a resounding victory for communism and reduced respect for the United States to one of the lowest points in the nation's history.

The far-reaching implications of the weak and vacillating policy, followed by the United States in the Cuban invasion, are evident in the statement made shortly afterward by Khrushchev to Presidential consultant John McCloy: "If Kennedy won't fight for Cuba," Khrushchev stated, "how do you expect me to believe he will fight for Berlin?" Four months later, the Berlin wall was erected.

VI

In the year and a half following the invasion, the Cuban armed forces were expanded to some 300,000 trained and well-equipped troops. Included are 8,000 from the Soviet Army, 6,000 Red Chinese and 2,000 from "neutral" Ghana.

These forces have available several hundred Soviet tanks, more than 1,000 pieces of Russian artillery, about 100 MIGs armed with air to ground missiles and an uncertain number of jet bombers (estimated at 30). In mid-September 1962, there were in Cuba 9 operational launching pads and another 15 were under construction. These were designed for IRBMs with a range of 1,500 to 2,000 miles.

During the period of this buildup, the United States government did little about Cuba but temporize and equivocate. While the Soviets hastily built their missile sites, our leaders argued the distinctions between "offensive" and "defensive" weapons. All reconnaissance flights over Cuba were cancelled from September 5 until October 14. Campaigning in Indiana during the weekend of October 13-14, the President charged that talk of American intervention in Cuba "is rash and ir-

responsible talk which strengthens the claims of our adversaries." The Vice-President suggested that intervention would be comparable to "beating your wife." In an interview published on October 19, Under Secretary of State Ball announced "Our policy toward Cuba is based upon the assessment that Cuba does not constitute a military threat to the U. S."

On October 22, in a complete reversal of previous policy, the President announced that six days earlier he had received evidence of missile installations in Cuba capable of raining nuclear destruction upon most points in the United States. He ordered a quarantine on the delivery of any additional "offensive" weapons to Cuba, called for the dismantling and removal of the missile bases and threatened full retaliation upon the Soviet Union if any *nuclear* weapon was fired from Cuba against any nation in the Western Hemisphere.

The great majority of Americans wholeheartedly supported the President in this action. So did the Latin American nations and most other nations of the free world. Respect for the United States rose sharply throughout the world. For a few days, our country held the initiative and the communists appeared uncertain and confused.

A few days later, however, Khrushchev dispatched a communication to the President offering to withdraw from Cuba "those weapons which you call offensive." Before Khrushchev's note was even received, the United States government jumped to accept it, apparently agreeing not to invade Cuba. The actual terms of this understanding have not been published and, with the government not only censoring news for military security purposes but admittedly issuing false information, it is extremely difficult to evaluate the present status of the Cuban situation.

As this is written, a few facts seem apparent. Missile bases are being dismantled and missiles—or something that looks like them—are being shipped out of Cuba. The number of jet bombers in Cuba has increased and the Soviets have, so far, declined to remove them.¹ The MIGs, which are capable of delivering nuclear strikes, although over limited distances, are still classed as defensive weapons. The futility of the UN as a force for world peace has again been demonstrated. The

¹Russia has recently promised to remove the bombers.

Castro (communist) government remains in Cuba from which it can mount military or ideological attacks on the United States and the entire Western Hemisphere. The United States has failed to follow up the advantage it so clearly held and has allowed the initiative to revert to the communists.

VII

In analyzing United States policy toward Cuba, it is important to recognize that it is but one facet in a line of policy that dates back to World War II. It is quite compatible with the kind of thinking that characterized the Chinese Reds as "agrarian reformers," that cut off military assistance to the Chiang-Kai-Shek government and that tried to force Chiang to form a "united front" with the communists. The result is, of course, Red China. Our Cuban policy is wholly consistent with those policies of a little over a decade ago which refused to allow Chinese Nationalist troops to fight on our side in Korea, which denied our own troops their hard-earned victory in that war, which arranged the removal from command of one of the greatest military leaders in American history and which finally brought about the ignoble armistice which the communists have violated hundreds of times. Perhaps we should not be surprised at this similarity of policy since the present Secretary of State was one of the principal architects of those earlier policies. Our persistence in negotiating with the Soviets on a nuclear test ban, after their flagrant violation of earlier agreements, and the State Department proposal that the United States liquidate our armed forces and entrust our security to the U. N. are part of the same pattern. So are our betrayal of Laos, our support of U. N. efforts to deny freedom to Katanga and our pressure on the Dutch to cede New Guinea to Indonesia.

Are these policies, as some have charged, the result of disloyalty within our government? Disloyalty has unquestionably been present. Some of the disloyal have been uncovered and others have uncovered themselves; but we would be naive to assume that all have been exposed or that the damage that can be done to a nation is proportional to the *number* of traitors involved.

Disloyalty, in the legal sense, however, is but one of the factors present. Another is the very close intellectual affinity

between communism and the socialism of so many of our policy makers and opinion molders. In his outstanding book *Witness*, Whittaker Chambers describes this very well. He says that, when he took up his sling and aimed at communism, he also hit something else, that something else being the socialist revolution which, in the name of liberalism, has been fastening its grip on the nation for three decades. Our liberals are highly vocal in their criticism of the American system but they seldom voice any sharp criticism of communism. One of their favorite theses is that if we will just treat the communists nicely and create no tensions, communism will in time develop an affluent society whose members will mellow; their society and ours will move toward each other, reaching a point marked at least by peaceful coexistence if not by amalgamation.

Another and closely related factor influencing our foreign policies has been the failure to understand the nature of the enemy. We are at war with a world-wide conspiracy that intends to destroy our way of life and to enslave us. This conspiracy is managed by a group of criminals who are totally lacking in honor and integrity and who hold in ridicule the basic moral standards on which Western civilization has been built. J. Edgar Hoover's selection of the title, *Masters of Deceit*, for his excellent book on communism, could not have been more appropriately descriptive of this group of international gangsters. Yet for 30 years, our leaders have been treating the communists as honorable individuals with whom we can negotiate on an equal basis to reach agreements that are binding on both parties. For 30 years, the communists have used negotiations as a means to deceive and to propagandize and have not hesitated to violate any agreement when it was to their advantage to do so.

Our foreign policies have been significantly influenced by the well-meaning but naive substitution of idealistic principles for the hard realities of world power politics. Our representatives talk of a system of "international law" and of "collective security," when it is clear that the only law or security that really exists is that which can be enforced with a gun; and they persist in the belief that all men are good and that the millenium will be at hand, if we can just

find the right formula—through a UN, an OAS or some similar legalistic mechanism.

Another major influence upon American foreign policy is the fear of nuclear warfare. This is especially prevalent in liberal circles where it has brought forth an amazing volume of literature built around the theme, straight from Moscow, that there can be no winner in such warfare and that we must therefore avoid it at any cost. An illustration of this philosophy is the statement of Harvard professor David Riesman in *The Liberal Papers*: "But as the cold war continues, it becomes increasingly difficult for decent Americans, humane enough to prefer peace to an egocentric national honor, to be outspokenly and genuinely anti-communist." This, of course, is the doctrine of appeasement and surrender.

Regardless of the polished inadequacies that have been employed to rationalize our policies toward Cuba and the world-wide communist attack, it has been apparent to most observant Americans that these policies have been conspicuously unsuccessful. With a few notable exceptions, including the demand that the Soviets remove the missiles from Cuba, we have been losing steadily since 1945. The United States is by far the most powerful nation on earth, both militarily and economically; but our leadership has generally failed to understand the fact that power, without the will to use it, is meaningless. We shall continue to lose the war against communism until we recognize the basic truth expressed by General Douglas MacArthur in his memorable address to Congress on April 19, 1951, when he said "There is no substitute for victory."

ORIGINATORS OF AMERICAN SOCIALISM

By A. P. KELSO

Read before "THE EGYPTIANS," December 13, 1962

I.

William Graham Sumner was Ward's chief competitor for recognition as the intellectual leader of the New American philosophy. This, being essentially a mass-product philosophy, was the fulfillment of the democratic dream. Sumner was no self-educated veteran of the Civil War, but a product of Yale, which for a generation he electrified if he did not quite dominate it. He it was who was chiefly responsible for the most useful of the sociologists' fallacies—that ideas are the result of non-intelligent social forces—as though the pressure of mass stupidity could create and extrude ideas.

Sumner was born at Paterson, New Jersey, in 1840, his father being an immigrant British machinist, a hard-working, absolutely reliable man and a teetotaler. Graduating from Yale in 1864, he spent the remaining war months in Geneva and Göttingen. The main result of his German university experience seems to have been the belief that only a clear and comprehensive view of any subject could be called the truth about that subject. His interest in economics he attributed to Miss Harriet Martineau's book, read long before in boyhood. The only stimulus derived from a year at Oxford came from the reading of Hooker's *Ecclesiastical Polity* and Buckle's *History of Civilization in England*. Hooker in particular reinforced his faith in "constitutional authority" and "historic continuity." The best that one got at Oxford was from one's fellow students. He did not admit that that was as it should be.

At that time he was intending to enter the priesthood. From 1867-1872 he served as an Anglican priest. From the latter date until his death he was professor of political and social science at Yale. Noah Porter who had selected him, regarded him as a viper warmed in his bosom and protested

against his feeding the innocent youth on Spencer and Mill.

Liberalism, however, as it appeared among the financial oligarchy, probably owes more to Sumner than to anyone else. The vitality of his personality redeemed his heresies; indeed, according to William Lyon Phelps who was himself to be a beloved Professor for a season, Sumner was the only member of the Yale faculty who was alive. Sumner had a great contempt for his fellow sociologists and their love of statistics. He preferred the title of social scientist, the garden variety of sociologist being ignorant of and consequently disloyal to the principle of historic continuity. To make good this deficiency he produced out of his preparation for his classroom lectures a study of the actual historical development of human society. *Folk Ways* is an American classic. In its approach to reality through the fantastic and bizzare, it is closer in spirit to the Leatherstocking tales than to the humdrum malevolence of *Dynamic Sociology*. It has an underlying gaiety, an unquenchable optimism.

Sumner's position is equivocal. From one side it is a defense of capital; from another it implies a modification of that system by coming to terms with its opponents. "Capital," he grants, "is the condition precedent of all gain and security and power." We in America live in that faith, but we also live under the most primitive and therefore—on his principle of historic continuity—the most fundamental of social laws, namely, the differentiation of society into the "we-group" or "in-group" as against "other-groups" or "out-groups." Loyalty to the "we-group" implies hatred and contempt for "other-groups."

This theory may be termed social realism, if that is taken to mean the recognition of social facts. More than that, Sumner suggests that the solution is in the hands of a group. To that extent, he abandons salvation through the thoughts of a genius or the power of a leader. His contempt for rationalism leads him to minimize the function of philosophy, which he places on a par with astrology; the solution for social problems is to be found in folkways which, when hardened, become mores and manners.

A large portion of Sumner's prestige was the result of his masterpiece. He had raked through ancient and medieval his-

tory and the work of the anthropologists, quite active in his day, to prove his points. Roman and Canon law found themselves corroborated by the descriptions of Snouck Hurgronje and Miss Mary Kingsley. He is true to the evolutionist explanation of accidental variation; there is no rational cause for the origin of a folkway. It is an accident from which an induction is drawn. For example: A hunting party of Eskimos met with no game. They sent one of their members back for the hambone of a dog; as he was returning to them, he met and killed a seal. Hence, one of the folkways of Eskimos is to carry the hambone of a dog with them on hunting parties.

How much of the anthropology Sumner relied on has survived the investigations of later workers in that field is immaterial. His general position, the irrationalist's explanation—the fallacy of fallacies—has been maintained. Customs that open up so trivially, become hardened, if consciously maintained, into mores. "Therefore," Sumner argues, "mores can never be intuitive. They are historical, institutional, and empirical." There speaks the Anglican priest. The writer once heard another of that company refer to matrimony as just an antiquated custom; unfortunately a large section of American males have taken such sociological humor seriously.

Following Galton, Sumner attempts to reduce an individual to so much capital value. Men too become capital. According to his authority, there have been only four hundred men of genius in all history; those who are the distinguished men—a lower rating of Sumner's own time—the new American aristocrats, leaders of opinion, are estimated at two hundred and fifty out of one million. At the other end of the scale (he was forced to use England and Wales as evidence since American equalitarianism would not permit such realistic data), there is one idiot or imbecile per four hundred; about a third of the population is about one-third human in value; forty per cent are two-thirds each of a man. But the remainder can be educated to the point where they "pass muster in a crowd." Such facts, irrespective of the accuracy of the statistics, show that the masses are not perfectly secure under their control; society is far more complex than the sociologists care to admit. Hence, not even the mores are socially ultimate; they can be superseded by the laws. For example, marriage has passed through three stages, from a folkway, to one of the mores, to

laws. Nevertheless the laws, Sumner declares, only ratify the mores. The grand example is the fusion of legislation with ethos in western Europe during the last 2,000 years—the Christian era.

This erasure of any appeal to providence, that is, God's will, or to ideals, that is, God's reason, is why the erstwhile priest denounced foreign missions. The missionary's ignorance of Moslem or Buddhist folkways leads only to racial antagonism—an offering of "something from above downwards." And if Christian civilization is only a current of accidental variations in customs, it is absurd to propose them as a solution of world ills, as Josiah Strong was doing. Yet, "reform and corrections" are not "hopeless." It will be some clever statesman or social philosopher, rather than a theoretical reformer who may gauge these social tendencies and guide them. "Great crises come when great new forces are at work."

To Sumner's disciples, however, a most interesting aspect was his account of the evolution of money, which is a form which the struggle of a group for existence takes. So-called labor is a part of the same struggle. Notice this hypostasizing of money, much as in Carnegie's mind; groups do not struggle for money, money is the struggle. Labor and money are protagonists. Sumner admits that the recognition of work as a blessing is modern; no doubt it is only one of the peculiar American folkways. The attempt "to glorify labor and decry wealth is to multiply absurdities." He is correct, the chief modern hypocrisy is the pathetic cry for work, followed by a determined effort to get out of as much of it as possible.

Quite aware of the various struggles of societies against societies in America, Sumner regarded fashions and fads, as well as their antithesis, satires and caricatures, as examples of such struggles. They were analogous to the mass hysterias (crusades) and mass persecutions (the Inquisition) in the Middle Ages, the most glaring example being the treatment of the negro by the whites. He delighted in reminding abolitionist New England that New York, New Jersey, and Massachusetts had had laws for execution of negroes by burning as well as Virginia and South Carolina. What he failed to analyze were the causes that ended such folkways.

Charles Henry Lea's history of the *Inquisition*, rated by some experts as the greatest technical achievement in history

produced in this country, provided Sumner with a vast amount of material supporting his theory. The masses of the people rather than the church were the originators of such cruelty, e. g., the yellow cross of heresy. Slavery, which had engulfed America in war in his young manhood, is treated similarly. The evidence from Roman and Church history is juxtaposed; Lecky is quoted: "Slavery was distinctly and formally recognized by Christianity and no religion has ever laboured more to encourage a habit of docility and passive obedience." Religion, then, is presumably not the source of reform.

This problem of slavery can be taken as a test case, to check Sumner's tacit claim to have produced a method for a scientific solution of social problems. Citing the economic decay of the West Indies after the abolition of slavery, he concludes that since "slavery springs from greed and vanity, it . . . is at once intertwined with selfishness and other vices." Therefore, "it is not an ethical product of folkways." It is hard to read that statement and believe one's eyes, coming from one who had reduced the ethical to the social. It is a verbal dodge to say that slavery, so far from being a folkway, is its very antithesis. It is harder, since he accepts abortion, infanticide, and senicide as "primary folkways which respond to the hard facts of life in the most direct and primitive manner." Cannibalism is a primordial *mos*; there is even a philosophy of cannibalism. No religion forbids it, because it was thrown out of the mores before any 'religion' was founded. He has not been the only thinker who has attempted to escape from his system; at best, there is a suggestion that since out of the social structure all mores have emerged, so out of society as a whole we can look for antidotes and perhaps complete cures.

Sumner was under the influence of German social theory, itself a product of German philosophy, although in revolt. Religion and philosophy were reduced to the level of "components of the mores." That is why he held neither of them could create or regulate mores. He cites a German on the German people. "The moral development of the German people" is such "that one cannot bear to contemplate it, because the people face the facts with absolute indifference. There is not a trace of moral initiative or moral consciousness."

For the destruction of mores he seems to rely on ridicule—a position which certainly distinguished him from the ordinary social philosopher. He throws into amusing juxtaposition the custom of celibate bishops of the third and fourth centuries of introducing women into their episcopal palaces with the custom of “bundling,” as practiced by Dutch, Scandinavian, English, Scotch, and Welsh; harlotry and gladiatorial shows, the theater and popular sports, afford examples of these social rituals and counter irritants of satire and ridicule. That is a residue of rationalism in Sumner’s philosophy. His belief that such problems as militarism, imperialism, and protective tariff can be laughed away—an attack on the tariff would be “true blasphemy”—is an appeal to some power that transcends society as such.

The conclusions he reaches, after this tour through a veritable museum of anthropological curiosities are: 1) Denial of the Lester Ward thesis—salvation through education. As a Yale professor he knew too well the *petition principii* involved. America’s faith in popular education is in itself one of the major American mores, this education failing largely because it has neglected the actual springs of action. Here the romanticist unconsciously betrays the utilitarian in Sumner. 2) Educated men are missionary-made men, cut out of their native habitat, and therefore weak and ineffective, suffering from that deadly uniformity called orthodoxy. Why, he knows of men dismissed from universities for preaching free trade. Education as such is no solution of social problems. 3) The solution lies in the right type of education, in the study of the history of the mores, or social and cultural history. We are living in a world of moral anarchy because we have lost our source of historic continuity. It is time, I suppose, that the study of a subject sometimes liberates a man from that subject, but not always; certainly the tribe of sociologists springing from Sumner were not free from sociological predispositions or even personal social prejudices. The liberal may be only one who has lost his convictions.

Sumner was quite aware of the sociologist’s predicament. Everybody was interested in the subject with “especial avidity.” Since all the great religions had included each of the human interests, science being supposed to be all-inclusive, so did

sociology which had inherited the tasks of both religion and science.

From the religious teacher the sociologist had acquired a dogmatic authoritarianism, but experiments in sociology being impossible, “because we cannot dispose of the time, that is of the lives of a body of men and women,” the only technique the sociologist has is the “cultivation of trained judgment.” His fear that sociologists will therefore be timid about generalizations is scarcely borne out by later developments; nor does he seem to realize how “training” a judgment may warp it.

His first bid for fame was his essay on *The Forgotten Man* (1883). The use made of this term by the New Dealers suggests that they failed to read it. According to Sumner, there are four levels of men among the Sovereign People. 1) The economic and political leaders; 2) Professional and business men; 3) The forgotten men—“the simple, honest laborer, ready to earn his living by productive work;” 4) The beggars. The burden is borne by the third level; victimized by the first group, they are not in a position to defend themselves as are the members of the second group, and such favors as society bestows are bestowed on those at the lowest level. But “a free man cannot take a favor.” This is pure Kantianism, and although it is present in the American, there is also present “an apparently invincible prejudice in people’s minds in favor of state regulation.”

This is America’s greatest achievement in national self-deceit. We want to be free under impossible conditions, expecting the benefits of French or Prussian bureaucracy without the surrender of any of our personal liberty. Who pays for this state regulation? The Forgotten Man.

The history of the States has been a history of selfishness, cupidity, and robbery. There is nothing metaphysical about civil affairs, that is politics. The victim is the Forgotten Man. “He works, he votes, generally he pays—but he always pays—yes, above all, he pays.” He does not want or get an office; he gets his name in the papers only when he marries or when he dies, but he “keeps production going.”

This sudden revelation in the priest’s soul—for, once a priest, always a priest—of the romantic passion of sympathy

may redeem Sumner's soul, but it has not saved America from the very practices which he abhorred. His indictment of "sociocracy," because of the inability of a society as a society to produce any criterion by which to judge its own activities and ideals, is not avoided by proposing a history of culture as a preparation for a career as a sociologist. If that history does reveal ideals, then the task surely is the promulgation of the ideals in the minds of the American people directly, rather than a reliance on the liberated few as saviors of society.

Sumner was almost as irrational as the frank sentimentalists he excoriates. Whereas they were either religious or political sentimentalists courting the masses, he was an academic sentimentalist—hence his power at Yale—creating a delusive faith in the unsuspected powers of the forgotten man, as if out of these depths of society some new folkways would accidentally emerge which would solve all national problems. If you are a believer in this thesis, you can cite the invention of the automobile, and so forth.

II.

The greatest heretic, or the greatest prophet, in economics, that has appeared in America was Henry George (1830-1897). Since the power to tax is the power to destroy, it can also be the power to create. The government, according to George, enters into the economic realm through taxing. He does not rely on the government to produce a supply of social experts as did Lester Ward, or on the accidental emergence of a genius as did Sumner. He had tasted poverty. His parents, devout Episcopalians, were too poor to send him to college. In 1855, he had sailed before the mast to India and Australia. His patron saint was Thomas Jefferson. "Liberty calls us again. We must follow her further; we must trust her fully. Either we must trust her fully or she will not stay." And just before his death he declared, "I believe . . . that . . . honest democracy, the democracy that believes that all men are created equal, would bring a power that would revivify not merely this imperial city (New York), not merely the State, not merely the Country, but the world."

As a printer and editor struggling in the maelstrom of the post-war era, he had migrated to California. California's crassness reduced him to scepticism. He married an eighteen-

year-old girl, and when a second child was born, he was reduced to begging on the streets.

In New York City to see the sights, George had been struck by the violent contrast between the palaces of Fifth Avenue and the slums; and particularly a spot made notorious by Charles Dickens. His eyes were opened: "Once in daylight, and in a city street, there came to me a thought, a vision, a call—give it what name you please. But every nerve quivered. And then and there I made a vow." The theme of the vision is given in the title of the revised version of his book, *Progress and Poverty* (1879). Two years earlier, he had published *Land Policy*. The vow was to eradicate that ancient foe, poverty, the oldest as well as the newest of class distinctions of which the Avenue and the Bowery were visible symbols.

He refused to see God's hand as directing the history of America (he was defeated at the polls), but he relied on Jefferson's God, the author of nature, who created man and the earth, and endowed man with the right to use the earth. This is a revival of the eighteenth century's program of the Conquest of Nature, today a faith that the creation of a global civilization will redeem man of his follies and his sins. As an economist, he swept away all other explanations of prosperity and wealth, of depressions and poverty, and found in rent the cause of the great economic paradox.

The unearned increment of real estate values, due to other men's activity, which their stupidity allows a few shrewd individuals to appropriate, must be taxed. No other forms of taxation are needed; all other forms tend to aggravate economic inequalities. George had seen this paradox in the land-values in California; land that had been deemed worthless and given away later had, in places, risen to one thousand dollars per acre. To allow a man to collect rent on land which another improves through his work is "the denial of justice" which leads to the "subtle alchemy that in ways they do not realize is extracting from the masses in every civilized country the fruits of their weary toil."

Thus, Henry George would begin where the socialist program must finally end, with the exappropriation of land. He did not propose literally to communize the land; no agrarians in America would have voted for that. His scheme was to

repeal any and all taxation, except on basic land values. There are certain difficulties here. Some of the value of the property may be owing to the owner's activities, even if some of it is unearned increment, and the difficulty is in assessing the values of the two factors. According to his proposal, an unimproved lot on a city street—held for future profits—contiguous to another on which a skyscraper has been built would pay the same tax. This is proposed to force either the improvement of the land or the relinquishing of ownership. But the formula is too simple to handle the problem of land values across the length and breadth of any country, for that involves considerable technical difficulties, and attendant inequalities, as any other economic scheme of salvation. For all practical purposes, Henry George's single-tax scheme is a proposal for the seizure of all rents above the carrying-charges of the actual improvement, but even in the improvements you will find unearned increment; the wages of the builders and the cost of the material are as inflated by a so-called standard of living as are rents proper. In normal times, if there ever have been normal times in the United States, the rental value of all the land has been approximately one-fourth of the total income. That quarter would bear the entire burden of taxation. There may be a landed aristocracy, carefully hidden away, but it scarcely compares with the financial and manufacturing aristocracy.

Henry George's proposal would remove the hated protective tariff and also do away with the alleged necessity for subsidies to agriculture, housing and education. Or would it provide the means for the exercise of a new type of villainy? The alleged government improvers of real estate in America do not have a stainless record.

Like other prophets, moreover, Henry George may have had a vision of the future, without realizing what in fact that future would be: "With want destroyed; with greed changed to noble passions; with the fraternity that is born of equality taking the place of jealousy and fear that now array men against each other; with mental power loosed by conditions that give the humblest comfort and leisure; and who shall measure the heights to which civilization may soar? Words fail the thought? It is the Golden Age."

He converted many. In 1897, over doctor's orders, he en-

tered the lists for mayor of New York, against Tammany, and died five days before the election: "But if I have to die, how can I die better than serving humanity?" His funeral was the greatest ever accorded a private citizen in New York; a hundred thousand mourners "viewed the remains;" another hundred thousand were unable to do so.

Academically speaking, Henry George suffered from the American passion for oversimplification, both in his diagnosis and prescription; cause and cure. The grasping landlord is not the only villain in the picture. The folly of man in overpopulating certain localities, which create the megalopolises of modern civilization, cannot be so easily stemmed; to argue that the land should be as free as sunlight and air is to fly in the face of all human history. If there is to be no private property in land, there is no reason to grant private property to what our hands have made. Land itself is as much a tool as the factory or home which stands on it. A great contrast appears between this panacea and that successfully sold to millions by Karl Marx. The wider scope of the Marxian theory is obvious; the argument which Henry George applied to land values can be applied to all economic values.

There is no question of Henry George's genius, if the creation of a glittering generality, a true idea, is to be counted as proof. At the same time he makes very clear the danger in limiting one's outlook; also he reveals the danger in depriving such minds of scholastic training. No true philosopher can rely solely on some pure intuition.

As an index of American mentality in the last quarter of the nineteenth century, the career of Henry George revealed the way to popularity—the presentation of a single idea, which is all that the bulk of mankind can absorb at one time. In his day the country was covered by travelling physicians who generally sold their panaceas in the glare of gas torches from the rear of wagons, in bottles. The solutions, chiefly epsom-salts, were colored red or green; and the oratory was just as impassioned as George's, for passion can create, finally, a kind of sincerity. It certainly can win acceptance from the frustrated.

III.

The advocate of socialism who succeeded in converting many in the church was Edward Bellamy (1854-1898), born

at Chicopee Falls, Massachusetts, educated at Union College—which has already figured in our story—and was a writer on the conservative New York *Evening Post*, which was so orthodox that it published its substitute for a Sunday edition on Saturdays; a relict of that journal is the present *Saturday Review of Literature*. Bellamy is evidence of the presence in the church of a secret belief in a very different political and economic faith, from that in which this country was born, and the tremendous vogue of *Looking Backward* makes Bellamy the greatest popularizer of socialism in the United States; as an author, he belongs in a class with E. P. Roe, that sentimental optimist in whose narratives everything comes out right because it always starts right. Perhaps the Warner sisters and “Pansy” should be added. All of them helped to enlarge the public which Harriet Beecher Stowe created: Good Christians interested in the social scene, willing to imbibe small doses of philosophy in strong draughts of fiction which purports to depict life.

Bellamy's book is still used by sub-rosa socialists in denominational colleges as “collateral reading” in “Social Science” courses; the great and bloodless revolution which Bellamy predicted for the twentieth century will be due to the vast development of mechanical substitutes for human labor, releasing the bulk of our time for leisure, devoted to education and recreation. In other words, Utopia, U. S. A.

Bellamy has been justified in part. We do live in a world of gadgets; a large part of our leisure is spent in education and recreation. He is discredited in part. The revolution has already produced two world wars; and, at least for a considerable portion of the body politic, the leisure is spent in dissipation and crime. Bellamy's key move was to propose an elimination of waste by eliminating competition, and here his mantle has fallen on Stuart Chase. However, this happy world can only be created by the State—government control.

According to Bellamy, the Rip Van Winkle of 2000 A.D., all persons will be educated by the State at state expense, to the age of twenty-five; then, for twenty years, all will work in labor battalions; at forty-five (Bellamy died, aged forty-eight), all will retire to enjoy perfect security and leisure, presumably to listen to an endless series of lectures by future Bellamies. (Here we find the source of both Mrs. Roosevelt's ideas,

which became those of Mr. Roosevelt, as well as the Great Books program by which President Hutchins has revitalized the University of Chicago). Bellamy was as kindhearted as E. P. Roe. It was just “the folly of men, not their hard-heartedness (which) was the great cause of the world's poverty” . . . “The Colossal, world-darkening blunder” . . . the principle of competition.” The way to eliminate that is to eliminate money; government cards (and these too made their appearance during war rationing) will be supplied to all.

The primal principle of democracy is the worth and dignity of the individual. That dignity, consisting in the quality of human nature, is essentially the same in all individuals, and therefore equality is the vital principle of all democracy.

This pronouncement opens to attack the entire position of socialism, for the claim that all men are morally equal would sweep away the entire literature of the past, which springs from moral conflicts and contrasts; it would not only close all our prisons, which Bellamy would have applauded, but would end all except technical education, for without criticism and principles of evaluation any liberal education would be sheer impertinence.

It may be expedient to accept the socialist proposal of equality in income for all. There may be no freedom from social unrest, as it was called in those days, but no government can force on any individual respect for other human beings if he does not respect them. Certainly not in America where for the last fifty years the literature of criticism—of satire, of exposure (muckraking), of gossip—has flourished as never before. The heroes and heroines of the old romantic tales may have disappeared, but the villains, in the guise of Senators, bankers, clergymen, and even innocuous professors, have greatly increased. Why, plaintively asks a recent observer, Howard Mumford Jones, are college presidents always cast in the role of villain? Why, one might ask in reply, has satire, or exposure of labor leaders not as yet appeared? The answer is, Bellamyism.

There was an attempt to elevate it into a religion or at least a denomination of Christianity; there were one hundred and sixty-seven Bellamy clubs by 1891, but it was swallowed

up in Populism, which evolved into Bryanism; and Bryanism was regurgitated by the New Deal. The spirit of Edward Bellamy goes marching on, but so do those of others.

IV.

Thorstein Veblen is the somewhat mysterious figure that stood in the background while Bellamy gestured in the foreground. His theory is a high-water mark of pure socialism—the proposal to grant society absolute autonomy; there are to be no checks and balances, the term, “social control,” suggesting that society has a right to control not only the individual, but all institutions.

Veblen was a pupil of William Graham Sumner at Yale and broke away from him. Sumner saw America from the ivy-covered towers of Yale, with the literary and religious traditions of the New England elite, while Veblen had already viewed it from an immigrant's farmhouse in the Middle West. To a certain extent, Veblen sectionalized socialism and created the engaging thought that from the prairies would come deliverance. Probably Veblen was the most effective master of insinuating ill-will for the rich; while Americans were worshipping the greater millionaires, Carnegie and Rockefeller in particular, Veblen described the effect of the competitive system which created them as a “hawk influence.” Ruthlessness was transforming America into a veritable battlefield between capital and labor. The plutocrats were the new American aristocrats. The suggestion is that they must go. He had no patience with his former teacher. Men such as Sumner were dogmatists who mistook for social and economic science what was nothing but the “projection of the accepted ideals of conduct.” Actually, Veblen was an ethical revolutionist and saw, correctly, that any genuine economic reform will entail a great upheaval. This, naturally, did not endear him to the timid, who talked of gradual evolution, aiming either to get as much for themselves or give as little to others, providing “trouble” was avoided.

America, for Veblen, was a sorry land, exhibiting economic confusion produced by the collision between two great powers, the engineers and financiers, the engineers creating the machines which were creating the new industrialism. A new materialistic revolution was imminent, potentially present. Un-

fortunately—and this seems to be Veblen's version of the American tragedy—the marvelous minds of these engineers were the slaves of the captains of finance, and the curse of America is the profit-motive. Its ethics is essentially predatory; the eighteenth-century pirate has reappeared as the director of a trust, the solution for this inner conflict between business and finance being to place society under the management of the engineers. An engineer-managed economy can, at least, replace the price-system.

With this proposal, Veblen has abandoned any faith in the free market. As for its feasibility of his scheme, he has no safeguard against the engineers becoming in turn the new financial aristocracy. They may be better, morally, than the idle rich; they might conceivably be sterner masters; at any rate, today it is the management by experts which is under attack by labor, while the stock-holders are practically eliminated from consideration.

At the meeting in Saratoga Springs in 1885, there was also present Simon Patten, the professor of economics at Pennsylvania. Reared in Germany where the benefits of a government-controlled economic system were already bearing their first fruits, he came to the prairies of Illinois, and during his academic career, finally reached Philadelphia.

“We no longer live in an age of deficit and pain,” he said, “but rather in an age of surplus and pleasure when all things are possible if we will but keep our eyes turned to the future and strip our intelligence for the task.” Thus in 1907, the millenium had practically arrived. In Philadelphia, where the concept of the protective tariff had been born, Patten proposed the logical corollary of government regulation of our internal economic activities. The free market was the cause of our difficulties. A few years later, he said, “Ideals are telic,” i. e., an ideal “must point out the means by which the end is reached.” This is a variation on the theory that the end justifies the means; it must do more than that; it must actually suggest the methods for attaining it.

It is with this inspiring hope that man can solve his social and economic problems, that Patten's most noted student, Rexford Guy Tugwell, transformed the New Deal: “Let us

take off our coats and get to work," he is reported to have said.

The social gospel may have won, and perhaps permanently, in America; but its weakness is evident. Discarding principles for opportunities, it is very difficult to understand, so much so, that one wonders whether its chief exponents know what they are doing. And like the utilitarianism from which it sprang, the goal of social welfare which it professes is as vague as the happiness of the greatest possible number, for what is happiness? And how is well-being to be determined?

No amount of national prosperity can atone for a loss of the sense of a national purpose. Or, does a nation exist only to satisfy its constituent members, to play a part in world affairs, or in world history? No philosophy reduced to the social gospel can answer such questions; the minds that propose it, live in an inevitably self-enclosed social atmosphere. There is such a fact as intellectual suffocation.

MEMPHIS POLITICS—PAST AND PRESENT

CLARK PORTEOUS

Read before THE EGYPTIANS, Jan. 17, 1963

One cannot write about Memphis politics in the 20th century without writing about the late Edward Hull Crump, so a great part of this paper will deal largely with Crump and his impact on Memphis.

As a boy growing up in Laurel, Miss., I sometimes read the Commercial Appeal, and of course Ed Crump was a familiar name to me, but I paid little attention to politics and really didn't know much about him. I was much more interested in the batting average of big Joe Hutchison and other heroes of the Memphis Chicks.

I had not been at Southwestern long in 1930 before I began to hear about Boss Crump. He was then in Congress. Some of the older students were interested in politics and sometimes the Crump machine was discussed in dormitory bull sessions—when the subject wasn't sex or athletics.

Some of the students were remarkably astute about politics. They said that Frank (Roxie) Rice was the real brains of the machine, and that Crump was the personality guy—the front man. I rather believe that to have been true, that Rice, Tyler McLain and others had much to do with the architecture of the earlier Crump machine. Anyway, when Crump lost both of these stalwarts to death within a brief period, he no longer had any "No" men. By that time he was well established and the machine became dignified and had the aid of Memphis businessmen, and coasted along for quite awhile.

But when I was a student at Southwestern from 1930 to 1934, the Crump machine was anything but dignified.

Much has been written about how the machine was free from graft, how Crump never took a dishonest penny, and how it was the will of the people that Crump do their political thinking.

That wasn't true during my four years at Southwestern and in my early years as a Press-Scimitar police reporter.

The machine was suckled at the breasts of vice, and the money to make the mare go came from pay-offs by those who wanted to operate.

It was during the great depression when I was a Southwestern student, and few of us had any money, and even those who did, didn't dare display it. The boys wore baggy corduroy trousers, usually, sweaters or sweat shirts, rarely ties and coats, except for dances, etc. You could have a big time on a date for a dollar. There were almost no cars on the campus, and a football player who had an old black and red topless Model T was very popular indeed.

Once a fellow student took me downtown with him. We went into the back room of a pool parlor, and to my amazement, there were crap games going strong. We were 'teen agers, but that didn't matter. My friend, who, incidentally, is now president of a big insurance company in Texas and is a Republican leader, had a quarter. He shot craps while I watched. That was one thing I hadn't learned in Laurel, Miss. He ran his two bits up to \$2.50, then fell off and went broke. He borrowed 50c from me, and that was something, as I didn't have many half dollars at that time. Well, he won a little with my capital, then finally lost it, and we left the place broke—without even the 7c street car back to Southwestern. We didn't walk—somehow we found someone going out that way.

I learned there were dice games and other gambling all over downtown Memphis, but it didn't bother me then—I thought that was just the natural way things were done in cities.

Later I discovered the Red Light district, with the aid of some of my more worldly wise fellow students. It seems there were brothels all over downtown Memphis, but more particularly on Vance Avenue.

There was even a white-coated, porter-capped Negro caper who stood on the corner of Main and Gayoso, who accosted men and boys and showed them where they could have fun at the Rex Hotel, a whore house just off Main. There were some street walkers, but most of the prostitutes sat in windows in the houses, usually facing close to the sidewalk, and tapped on the window with a nickel.

The going price was \$2, but college boys didn't often have that much. Besides, some of us were afraid of catching a venereal disease or something.

But we found out it was fun to make the rounds of the houses on a Saturday night, or some other night after attending a movie or something downtown. It cost a dime to play the juke boxes of that era, tho it was a nickel elsewhere. Cokes were a dime, beer 25c a bottle—home brew, it was, until later, too.

A group of us would go in, and the girls would come out, in various stages of undress, and soon would be trying to seduce us into going upstairs with them. That failing, they would get us to buy them something to drink and to play the juke boxes. We got a certain amount of satisfaction, pinching, patting, touching, kissing, etc.

After awhile, they would get tired of us, or some cash customers would come in, and we would be told to leave, sometimes by tough-looking bouncers. There were enough houses that we didn't run out over the months, and many of the girls changed, anyway, and didn't remember us when we returned sometime later. It was rare for a girl to get a date with a fee from the college boys, but it happened sometimes.

Some of the boys liked to go to the Negro brothels. It was cheaper and the girls were quite nice to white boys. Some fellows liked them better anyway.

We had another stunt we'd pull on Beale Street—a group would go into a pawn shop, pretend to be an orchestra, play the various instruments and pretend we wanted to buy them, then would get peeved about nothing and all walk out and let the operator think he had missed a big sale. We once went into a Beale Street tailor shop, and all got measured for identical suits, several kinds, as a band. Then got sore because we couldn't get some outrageous colored lapels or something, and walked out.

We also learned where the bootleggers were, and which ones stayed open, had the better grades and prices. There was one under the Summer Avenue viaduct we patronized for dances, etc.

So I knew something about the vice situation in Memphis when I finished Southwestern and went to work for The Press-Scimitar the next day, June 7, 1934.

But I had a lot to learn about politics and how things were with the madams, bootleggers, gamblers, etc., and the politicians.

It wasn't long before I was assigned to the police beat, and I started getting my education. There was something fearsome called the "Lid" which would be clamped on and off for some strange reason. I would do stories about the "Lid" being on, not quite understanding why.

Knowledge came. Some of the friendly police officers, including some shift captains, were really collectors. The dice games, the madams, the bootleggers, all paid off to the political machine. It was how the money was obtained to buy poll tax receipts for the Negroes who were "voted," for the big political parties, and other expenses of a political machine.

Sometimes the "Lid" would go on because the weekly payments were being raised. Sometimes it was because the Federal Grand Jury was in session, or because some Federal "revenueurs" or other such officers were in town. A select few sometimes were permitted to keep open, even when a lid was on. You could generally tell how long or strong the sudden close-down on vice was by those permitted to stay open. Jack's Place on Lamar, a bootleg place, for instance, was almost never closed. Jack had done the Boss some great favor back in the old days.

Now and then a high-ranking officer would be "busted," and sometimes discharged. If an officer didn't turn his vice collections in to the machine, and got caught, he was sure to go. Of course, policemen did some grafting, but the major take was for the machine. I remember a popular captain, who had been voted the most popular officer on the force, and two other captains all got fired. Then there was the time an inspector got in trouble. The story was that the Boss himself had accused him of keeping money collected for the "political organization" and had slapped his face.

Gambling went on and on in those days. Bob Berryman even had a suite in the Peabody, where he conducted gambling. There were places all around, where WMPS is now,

across from Loew's Palace, in the backs of pool rooms, in hotels, etc. Berryman had quite a place on Second, across from the Peabody, and there was something about an elevator being stopped between floors on a raid. Usually, the vice operators got tipped off, from the police station, before there was a raid. Citizens and even the newspapers just seemed to accept the facts of life, there was vice and there were pay-offs, and nothing could be done about it. At least nothing was.

I remember once going to Shelby County Jail and talking to two brothers, named Sparks, from Kennett, Mo. Their father was a banker. They were from a good family, but wild, and had been in several scrapes with the law. But this was serious—they were in jail charged with holding up a dice game at the Cotton States Hotel, which was where WMPS is now. It was a bit embarrassing to police, a "protected" gambling joint had been robbed.

The brothers freely admitted robbing the place—in fact, they said they robbed it twice. They said they had been cheated out of their money, and went back and got it with guns. They didn't get it all back the first time, so they returned, and the return trip brought about the arrest.

I went to the Cotton States to talk to the well-known Memphis gambler, who later operated Black Fish Lake in Arkansas. When I told him the brothers said they had been cheated, he was quite concerned. He didn't mind a story about his gambling place being robbed—good advertisement. Nobody seemed to question the reason for a gambling place downtown that could be robbed. But being cheated—that was bad advertising. He pulled out a \$100 bill and tried to get me to take it—and that was something for a \$10 a week reporter in those days. I refused. He reached for more money. I stalked out, principles intact, not wanting the temptation to get too great.

I wrote the story. The place was closed, temporarily anyway. Strangely, the Sparks brothers were not prosecuted, but were quietly released.

Finally the end came to vice. Prohibition was repealed and legal liquor voted into part of Tennessee in the late 30's. Many of the bootleggers got liquor stores and continued to contribute to the political machine kitty as businessmen.

Finally, in 1940, and that's just 23 years ago—vice was ended in Memphis. There have been many stories about this, that Mr. Crump got religion, that it was because a son was killed in a Cotton Carnival good will tour plane crash at Grenada, Miss., in 1939, etc. I think I know why.

Crump ran for Mayor in 1939. In 1916, he had been ousted as Mayor, the one major setback in his career before the Kefauver defeat in 1948. It was on a matter of not enforcing the laws about state prohibition, gambling and vice in Memphis. Anyway, he easily won the election, but there was some doubt as to whether or not he was eligible to serve as Mayor, because of the ouster.

A few minutes past midnight on the morning of Jan. 1, 1940, Crump stood on a railroad platform in a snowstorm at Grand Central Station, just before leaving for New Orleans for the Sugar Bowl game. In high good humor, he threw snow balls at reporters, and resigned, after withdrawing the official invitation of the city to the American Newspaper Guild to hold its national convention in Memphis. Crump was fighting the CIO in those days, and the Guild was in the CIO. The convention was held in Memphis anyway, and a strong attack on Communism in the Guild was made.

Crump resigned as Mayor, a position he probably couldn't have held anyway. Joe Boyle, former Courthouse custodian and always a loyal Crumpet, was vice mayor, and he succeeded as Mayor, until the faithful City Commission, which stayed at home, could meet later in the day and elect Walter Chandler, who resigned as Congressman to become Mayor by appointment. The late Watkins Overton, who had broken again with Crump, ceased being mayor at midnight. Thus Memphis had four mayors within a period of less than 24 hours.

Tho the TVA deal was given as the reason for the break with Overton, it was generally believed at the time that the real reason for the break was that Overton was acting on his own, and getting too much favorable publicity. The first power deal did not include gas, and Crump had it done over again.

Cliff Davis was elected in a special election to replace Mayor Chandler in Washington as Congressman. Faithful Joe

Boyle replaced Davis as vice mayor and police commissioner.

It was Joe Boyle who broke up vice early in 1940. Of course, he did it on the say-so of Crump. The machine became respectable. It seems that O. John Rogge, a special Department of Justice prosecutor, had cleaned up New Orleans. War was approaching. The Navy was going to Millington. The Second Army headquarters were in Memphis. There was Camp McCain set for Grenada, Miss. The federal government didn't want the young service men tempted by vice in Memphis. Rogge was going to clean up Memphis.

But the veteran Sen. K. D. McKellar had a lot of power, and threatened to hold up the Department of Justice appropriation. A compromise was reached. If Memphis would clean up vice, then the Department of Justice wouldn't have to do it. It was agreed.

The ward heelers collected for poll tax receipts from the brothels madams on a Tuesday night. Two nights later, they got the police orders, issued by Joe Boyle, to close. They were furious. I visited them and got some pithy quotes, and one of my best stories. We were able to tell all about the Red Light district because of their closing. A Presbyterian minister wrote that the Porteous story on the closing of the brothels was one of the greatest he had ever read. An Episcopal minister from Mississippi wrote that Porteous should be sent to Siberia. The letters ran beside each other. But the era of organized vice which pays off was over. Of course, there is still vice. And probably some police pay-off. But it no longer goes to a political machine.

From 1946 until his death Oct. 16, 1954, the Crump machine was oiled with dollars from businessmen rather than from vice. Some may have been reluctant to give, but give they did, and Crump enjoyed some of his greatest successes without the aid of vice, until the Kefauver defeat in 1948.

Mr. Crump liked to "show off" his office holders. Once in his swank office at E. H. Crump & Co., while entertaining some important politicians from Nashville, he sent for Cliff Davis, whose office as police commissioner was in the nearby police station. He had Cliff perform, and Cliff soon had the group in an uproar with his jokes and impersonations.

Another time, Crump telephoned Walter Chandler, at the

time Mayor, and made him sing "America" to a group in his office. Chandler has a rather high squeaky voice, and is not famed as a singer.

Crump would break with the biggest of political figures when they failed to agree with him. He and Sen. McKellar long were political allies, but they almost broke when Crump was in Congress in 1930-31. However, they made peace, and Crump announced he would support McKellar for re-election in "1940, 1946 and 1952." He did, tho McKellar lost to Albert Gore in 1952.

Crump and McKellar differed on their choice of candidates for Governor in 1936, but didn't break over it. Crump backed Gordon Browning, who had served in Congress and was a World War I hero. McKellar supported Burgin Dossett. With Crump's help, including a 60,000 majority in Shelby County, Browning won. Browning sent a telegram which probably haunts him yet, "60,000 reasons why I love Shelby County." Crump and Browning became bitter political foes.

On Oct. 6, 1937, Crump made a public statement that Browning had come to his office and proposed a three-way political trade over a three-year period that would have sent Crump and Browning to the Senate and Lewis S. Pope to the governorship of Tennessee. Crump said he refused the deal and the break with Browning resulted.

Browning did not agree as to the cause of the break, and set up a state political organization with the purpose of destroying the Shelby political machine as a force in state politics. A long legislative fight followed, with Browning trying to redistrict Tennessee and even trying to impose a county unit system to cut down the big Shelby vote. Frank Rice, in those days a strong influence with rural legislators, kept Browning from succeeding.

Foes of Crump said the break with Browning was caused because Browning failed to offer a vacancy in the U. S. Senate, which the Governor fills by temporary appointment in the case of death, to Crump. It was claimed Crump had wanted at least a refusal of the offer.

There was a bitter political fight in 1938. It was really between Browning, running for re-election, and Crump,

rather than Prentice Cooper, who was running against Browning.

Browning threatened to send the National Guard to Memphis to police the election, but a federal injunction stopped him. I remember a great number of clubs at the police station, made at a golf shaft and block factory, which were to have been handed out to special deputies. Crump had influence even in Federal Court, and Browning never had a chance with the troops.

Browning made a political talk at the Fairgrounds during the campaign. The Crump machine saw to it that a switch engine kept busy on the Southern tracks, with whistle and bell, so that Browning could not be heard easily. Also, a Crump-tame federal marshal served injunction papers on Browning, to keep the Guard out, during the speech. That same marshal was later banished by the Crump crowd, in a scandal involving sale of condemned eggs, etc., to the Penal Farm and elsewhere.

The 1938 campaign was one of the most interesting I ever covered. A rift with McKellar threatened temporarily. Walter Chandler came home from Congress and announced as the Crump candidate for Governor. Sen. McKellar was supporting Prentice Cooper. But Chandler withdrew in favor of Cooper, and that healed that rift.

Browning travelled about the state in a trailer, campaigning supposedly against Cooper, but really against Crump.

Crump had plenty of time in Memphis to think up stinging rebukes to Browning, such as "In the Louvre in Paris there are 28 pictures of Judas Iscariot—none look alike but they all resemble Gordon Browning."

"Gordon Browning is the kind of a man who would milk his neighbor's cow thru a crack in the fence."

"Sparta perished for the want of Spartans. The Jekyll and Hyde governor will perish Aug. 4 for the want of votes."

I would know that Browning spent the night in say Knoxville, and was en route to Johnson City in his trailer. We had a wonderful telephone operator, who really knew how to find people. We would figure about where Browning ought to be,

and she would get a rural telephone operator to flag down the Governor. I would get him on the telephone, tell him Crump's latest crack at him. Without hesitation, Browning would come back with a crack, often topping the Crump insult. Browning was a remarkable ad libber.

But the 60,000 Shelby majority was reversed, and it was Cooper who bested Browning, tho Browning was to have his revenge 10 years later.

An interesting sidelight in the 1938 Browning fight was about an incident that started with the public beating of the late Ben Kohn, a lawyer who never hesitated to fight the Crump crowd.

Anyway, Kohn got slugger, and a big bruiser was arrested—there were witnesses, as this happened downtown. The slugger was docketed as Sidney Smith and immediately released. Some investigation revealed that the slugger's real name was Sidney Queen, from a family of bouncers and gamblers, etc., friendly to the political machine.

There was a hue and cry but Queen had disappeared. I learned he was in Osceola, Ark. I went to Osceola with a photographer, and talked to Queen's sister. He wasn't there but she had a letter to him from a Memphis detective, obviously with money in it. The sister told how she had told Sidney not to get mixed up in all that, etc.

I wrote my story. The Crump crowd went over to Osceola with reporters from the other paper, and the sister denied The Press-Scimitar story, which was completely accurate. Meanwhile, Browning's state police had taken the letter, and had it in their office in the Sterick Building.

The next day a city editor sent me back to Osceola to find out from the sister which story was correct, mine or the Commercial Appeal's, tho he well knew the truth. I was chased away from the sister's home by her husband with a shotgun.

The Browning police were afraid to open the Queen letter, and I don't know if it was ever opened.

After the Cooper victory over Browning, the Crump machine really went into high gear. World War II came along,

and there was no stopping the Crump crowd. The young men who might have fought the machine were in service.

There are many true stories about what happened when Crump was the political king. Democracy went by default. Frank Thompson, an undertaker, fought the machine. So police motorcycles followed his ambulances, making arrests for violations. Doughty old Frank Thompson advertised he had the only police-escorted ambulances in the city. People like Frank Thompson, Ben Kohn and a few others fought the machine, tho the odds were tremendous against them.

Then there was Charles Brown, an attorney in a law office friendly to Crump. He had been to the legislature. Once at a Crump picnic, Brown was playing gin rummy, and didn't want to stop. But Mr. Crump wanted a softball game. Finally, in disgust, Brown threw down his cards, said "when the Boss says you gotta go, you gotta go." This lese majeste was enough to have Brown booted out, from his elective office, his law office and even from Memphis. He moved to Nashville.

There was Gerald Stratton, from a prominent Memphis family, a lawyer who was County Court Clerk. He broke with Crump, and lifelong friends wouldn't speak to him. Stratton finally moved to Boston where he became a successful businessman.

Many such examples could be given of persons who were punished because they didn't agree with the Boss. There was Charlie Bryan, long a laborer in the Crump vineyards, who got cross-wise, and his Stockyards Hotel bar, with the saddles for seats, was ruined by police in a raid.

There was Dr. A. S. Martin, a negro druggist who dared to support Wendell Willkie for President. It wasn't so much that he was for Willkie, but Negroes in Memphis in those days were supposed to do as they were told politically, and any ideas of doing otherwise could be bad. The negroes were voted—they didn't vote.

So police picketed Martin's South Memphis Drug Store, searching customers entering the front door supposedly for "Narcotics," while delivery boys went in and out the back without being molested. It got rather ridiculous when we got

a picture of a negro first grader going in the store for an ice cream cone, being searched for "dope." But Dr. Martin finally gave up and moved to Chicago. A Franciscan friar was searched at the time while going to give last rites to a dying parishoner.

Ah, yes, things were different in Memphis in those days—and strangely enough, you even hear someone now and then wish for the old Crump machine days again.

After Shelby got grace and no longer had gambling, Crump decided to stop it in Mississippi, too. He had broken with Bob Berryman, long a faithful henchman permitted to run gambling, for a price, in Memphis. Berryman was supposed to have threatened Crump after having had to stop gambling in Memphis.

Anyway, Sheriff Guy Joyner, another tame Crumpet, put up signs on the highways leading into Mississippi, reading: "They rob you, they Beat You, They Cheat you," etc., warning citizens against Mississippi gambling places in general, and Berryman's specifically. Naturally, Mississippians didn't like it, even from a native of Mississippi. It was one of the major Crump mistakes.

But Bob Berryman got so agitated with the needling of Crumpets about a burly bouncer named John Phillips, that Berryman went gunning for Phillips, and with the aid of certain police, got Phillips in the back of a Main street building, with the rear door locked, and killed Phillips. Crump thus lost two enemies at once, as Berryman was sent to prison and now operates a tourist court near Nashville, never having returned to Memphis. Crump ran several of his former supporters, gamblers no longer wanted in respectable Memphis, out of the city.

Crump had an unlisted number at his office, and I had the number. I remember calling it one morning, and getting cut into a conversation between Crump and Dr. Charles E. Diehl, who was then president of Southwestern. I recognized both their voices, and it was all I could do to be a gentleman and hang up without eavesdropping for news. I later reached Crump at home and told him of the conversation. He was amazed, said his home telephone had nothing to do with the unlisted office number. Incidentally, Mr. Crump used to find

Southwestern graduates a bit too liberal—they often did not agree with his political philosophy.

Crump was born on a small farm in Marshall County, Miss., Oct. 2, 1874, in grinding poverty, with the hatred of carpetbaggers and the nostalgia of better days, which shaped life in the South after the Civil war. His father, Capt. Edward Hull Crump, fought for the Confederacy with Gen. John H. Morgan, the Kentucky Raider. Capt. Crump died of Yellow Fever in 1878, when Crump was only 3.

Crump, a tall, skinny red-headed kid, used to pop inflated pig bladders in lieu of firecrackers. He went to a one-room unpainted school. But he educated himself pretty well.

He left home at 16, went to the Delta across the state and was a country store bookkeeper at Lula. He moved to Memphis at 17, in 1892. He came with nothing except his personality and a strong desire to be successful.

Crump worked as a bookkeeper, cashier and credit man. He became secretary-treasurer of Woods-Chickasaw Co., manufacturers of saddlery goods and dealers in farm implements, at 23. A few years later, he bought the business and operated it for several years as E. H. Crump Buggy & Harness Co. The automobile finally hit the saddlery business, but by then Crump was mayor of Memphis, having won over the old political boss in 1909 by 75 votes.

Mr. Crump married Miss Bessie Byrd McLean, whose well-to-do father was with William R. Moore.

Crump's first political job was election officer in the tough old Fourth Ward in 1901, and the next year he was selected a delegate to the state Democratic convention. He was elected to the board of public works in 1905, and police and fire commissioner in 1907. He was re-elected mayor in 1911 and 1915, then ousted. He was elected county trustee in 1918, re-elected in 1920 and 1922, and under the fee system, made a lot of money. After leaving the office, he had it switched from fees to salary, as it still is.

Asked how he happened to enter politics, Crump once said: "frankly, I don't know. I always believed every citizen should take an interest in his government. My interest was an

aggressive one from the day I cast my first ballot when I was 21."

The big Memphis real estate, loan and insurance company that still bears his name was founded by Mr. Crump and the late Stanley H. Trezevant, who had been U. S. Marshal, in 1921, long after Crump had become political boss. It was first known as Stanley H. Trezevant & Co. In 1923, after Crump left office as county trustee, it became Crump & Trezevant. In 1936, Trezevant sold his interest and it became E. H. Crump & Co. The fact that Mr. Crump was Boss helped the business boom into a very successful one.

In his heyday as a boss, Crump, who knew the Bible, Shakespeare and a lot of other literary things, used to write really torrid denunciations of his political foes. He was aided by newspapermen, such as Squire Tom Phillips, still living and about 90; Marvin Pope and others. But the full-page newspaper ads had the Crump touch.

One of his favorite targets was the late Silliman Evans, publisher of the Nashville Tennessean, who opposed Crump as long as he lived. Crump would say such things about Evans as:

"Liars will steal and rogues will murder, if necessary, to accomplish a nefarious purpose . . . The honeymoon of this lying, corroding crowd of murderers of character is over. Their swill barrel is empty—they have scraped the bottom of the garbage can . . . Evans intoxicated himself with megalomaniac dreams of power . . . He has tried bullwhipping, browbeating . . . common ordinary lying . . . but the canker of disappointment gnaws at his soul."

I got involved in one of the Crump ads myself, and could have been known as "lower case clark" if Crump hadn't changed his mind.

It was in 1948, when Crump took his state licking from Browning and Kefauver. I was covering Browning. He kept telling a story, every time he spoke, about Crump and Will Gerber, his attorney general, and a leading Crump lieutenant. It seems Crump and Gerber were in a cemetery taking names off tombstones to vote them. Gerber, according to Browning, told Crump he just couldn't read the name on the old

stone, just to put down any name, as someone was buried there. Browning's tag line and laugh getter was "No, Willie. Get the name. It has to be an honest election."

Well, on a dull day I used the Browning anecdote, quoting candidate Browning. Crump and I usually got along pretty well—at least he would talk to me, tho he knew my paper was always fighting him.

Crump ran one of his page ads denouncing me. He somehow had the idea the story cast an aspersion on his dead son. Thruout the uncomplimentary diatribe he spelled my name without capitals—clark porteous. Edward J. Meeman, editor of The Press-Scimitar then, and now editor emeritus, called me into his office, said the ad was libelous and I would have action, over the lower case letters, and told me the paper would not run the ad if I objected. I thought it was funny and told him to go ahead, I wouldn't sue anybody.

But at the last minute, Crump changed the ad to capitalize my name. Apparently his lawyer had told him it was libelous. So I lost a bit of fame, as I would have been remembered as the reporter whose name Crump wouldn't capitalize.

Browning, Meeman and others were the subjects of some of Crump's scathing prose.

But his own prose helped defeat Crump's candidates in 1948—he made the mistake of calling Estes Kefauver a "pet coon."

The beginning of the downfall of the dictator is rather interesting, so I will discuss it a bit.

There was fear of opposing the machine in Memphis. Men had been beaten, denounced and run out of town. The least an opponent could expect was to be smeared by the machine's orators and by its whispering campaign. There had been an entirely unjustified attack on Meeman, in the name of Jim Pleasants, Mayor of Memphis, and Pleasants never did get over doing this terrible thing he had not wanted to do. He used to ask me if there was some way he could make amends.

Everybody knew the Crump machine ran the city and county offices, called the jury panels, controlled the state legislature, elected governors, Senators and Congressmen and

also sat on the Tennessee Supreme Court. How was a citizen to go about fighting this Goliath of a machine by himself? Not everyone wanted a change. Some, particularly those who got some of the city and other government business, such as insurance and the like, actually said they liked the system, tho democracy had decayed. It was like a man who let his right arm hang useless at his side for months. When the time came to punch, he had no punch.

But there were some ready to battle the Goliath. They just needed a way. Even tho everything including the PTA's were controlled, there was a sense of guilt, and undercurrent of dissatisfaction with boss rule. And Crump was making mistakes, more and more mistakes.

A former newspaper man named J. Charles Poe moved to Memphis from Chattanooga. He went to work with Nickey Bros. lumber company. Poe was not in the habit of having others think for him.

He went to see Meeman in 1948 and said he wanted to "come out" for Estes Kefauver, a Congressman from Chattanooga who was running for the U. S. Senate. Now people in Memphis didn't "come out" for candidates not supported by Crump. It was amazing to Meeman, the hardest anti-Crump fighter of all, who had kept a flickering flame of opposition to the machine for 17 years, since he had come to Memphis as editor of The Press-Scimitar.

Meeman had contended that 10 strong citizens—10 men with their roots in Memphis—could start a movement to defeat the machine. Well, Poe was one of his men.

Others joined. There was William Barr, a paint specialties manufacturer; Lucius E. Burch, Jr., a brilliant attorney originally from Nashville, who had known political freedom and wanted it for Memphis; O. D. Bratton, a lumberman; Edwin Dalstrom, manager of a wholesale paper company; Dr. Henry Gotten, physician who had helped clean up Baptist Hospital; and Edmund Orgill, who had been president of the Chamber of Commerce and was president of Orgill Bros., a firm more than 100 years old.

These were substantial citizens. They founded the Memphis and Shelby County Citizens Committee for Estes Kefauver.

Mr. Poe died not long after his victory. Perhaps there should be a public monument to him—he started the real Freedom Train in Memphis, helping sidetrack a machine that wouldn't let the Freedom Train come to Memphis.

This group got some breaks. First, Kefauver turned out to be a terrific campaigner. He stumped the state, going to such places as South Fulton, Tenn., where no statewide candidate had been before, and giving voters the image of a real sincere guy who was honest and knew what he was doing.

And like him or not, the unknown Kefauver after his election soon became nationally famous, and still is.

Another break was that Crump had a break with his faithful Senator, Tom Stewart, who had won dubious honor in the '20's as the prosecutor, behind William Jennings Bryan, in the famous monkey trial on evolution in Dayton, Tenn. There have been various stories as to how Crump broke with Stewart. One is that Will Gerber went to Washington, and asked Stewart for help in getting more Jewish refugees into this country, and Stewart is supposed to have said "there are too many Jews here now, Will," not thinking of Gerber being Jewish. Gerber then told Crump Stewart was anti-Semitic. Gerber denies this story, and it may have been something else.

Mr. Gerber said Crump really got off Stewart as a result of the 1942 campaign, when Stewart narrowly defeated Edward W. (Ned) Carmack, of Murfreesboro, Tenn., whose father had been a U. S. Senator, and was slain in Nashville by the Coopers. There is a statue of the elder Carmack at the Capitol.

Anyway, Ned Carmack ran a hard campaign, and would have won except for the lopsided Shelby vote for Stewart. At one point, Stewart became so dismayed he stopped making talks, and Crump had to send emissaries to Winchester, Tenn., to get Stewart back on the ball.

Carmack made numerous charges against Stewart. One was that he had his two sons on his Senate payroll, though both were students at Sewanee and were no where near Washington. Mr. Crump found that this was true, but he was

stuck with Stewart and had to elect him, to keep his record for no defeats intact.

Also, Crump became unhappy with Stewart because Stewart voted against Social Security for the people of all the nation, while voting for a pay raise for Senators.

Anyway, Crump was thru with Stewart in 1948. Col. Roane Waring had served in the Army with a fine Middle Tennessee judge, John Mitchell. Crump summoned Waring, president of the Street Railway, to ask him about Judge Mitchell. Waring said he would walk a mile to vote for him, and was strong for him. Crump decided to back Mitchell in the three-way race.

But Tom Stewart wasn't ready to roll over and play dead. He had taken good care of his fences back home, written letters, did favors when he could, and he stayed in the race. Judge Mitchell was not a strong campaigner and soon got tagged with the nickname "Lost John."

Kefauver managed to win on a plurality, but not on a majority. If it hadn't been a three-way race, Kefauver probably would have lost to Stewart.

Another break was in a scathing Crump ad, in which he called Kefauver a pet coon, saying a coon looked one way while sticking a paw into a drawer to take something. Kefauver took up the coon matter, said he might be a pet coon, but he wasn't Mr. Crump's pet coon. Kefauver donned a coonskin cap, and it became a sensation. He had folks laughing at Crump and his machine. Keef campaigned in his coonskin cap and it became his trademark, and he darned near rode it to the White House.

Many in Tennessee were displeased because Crump had dropped Stewart, so in the Governor's race they switched from Crump's candidate, Gov. Jim Nance McCord, running for re-election, to Crump's old enemy, Gordon Browning. Browning still had many friends in the state, and it ended up with Crump losing both the Senate and gubernatorial races. And it all started with Charlie Poe visiting Meeman to "come out" for Kefauver.

Ironically, the two Eds of Memphis, who opposed each other politically over the years—Ed Crump and Ed Meeman

—were born under the same star. Crump was born Oct. 2, 1874, and Meeman was born Oct. 2, 1889. Somebody may make something of the fact that they had the same birthday.

After 1948, Crump's power dwindled, tho he was still in control of Memphis when he died at 80 on Saturday, Oct. 16, 1954. But he never was quite as fearsome or formidable after the double defeat in 1948.

When E. H. Crump breathed his last in his home at 1962 Peabody that Saturday afternoon, a living legend in his own lifetime was gone, the last of the big city bosses, and probably the most powerful, and certainly the best. No hint of financial scandal or corruption ever touched Crump. All he did was take away democracy, and it was a long time before very many missed it.

So much for the past. I consider the present in politics the era since Crump. Perhaps we haven't done as much with our political freedom as we should have done. Some say it has been a mess. But, anyway, it's a democratic mess, and we do have our political freedom. Perhaps we aren't ready for it, but I believe the people will know what to do with it as the years pass.

In 1955, Edmund Orgill, one of the original Kefauver supporters, was elected mayor, in the first free election in Memphis in about half a century.

Orgill is a businessman who turned to politics as the result of a book. Lucius Burch read Clarence Streit's book "Union Now," and was so impressed he sent a copy to his friend, Ed Orgill, who found he liked the book as much as Burch did. A desire to help the world avoid war led Orgill into politics.

He became Mayor with a City Commission that did not always back him up. There was Henry Loeb, young laundry executive who turned to politics as an independent, after successfully challenging the old political crowd who controlled American Legion elections. Loeb was elected Legion commander, did well on the Park Commission, and was elected to the City Commission. The others thought they were handing him the dirty end of the stick when they named

him Public Works Commissioner, but he rode that job into the Mayor's chair.

Loeb didn't always agree with Orgill, and soon developed ambitions to succeed Orgill as Mayor, which he did. The other three on the commission—Claude Armour, John T. Dwyer and Stanley Dillard, were all hold-overs from the Crump machine days. They formed a "working majority" that Orgill and Loeb, and sometimes Orgill alone, couldn't buck. Orgill failed when he tried to put a negro on the city hospitals board, and to do certain things that have since been done.

In 1956, Orgill ran for Governor, and had he been willing to compromise just a little with some of his principles, he would have been elected. As it was, he finished third in a close three-way race which found Buford Ellington the victor by a narrow plurality. Judge Andrew T. (Tip) Taylor of Jackson was second. If Orgill had made certain agreements, Clifford Allen of Nashville would have withdrawn in Orgill's favor, and Orgill would have won, most experts believe. As it was, Allen stayed in the race and drew enough votes in Davidson County to keep Orgill from winning. Orgill also lost Shelby County—the new found political freedom hadn't taken hold well enough for many to accept what they considered liberal ideas of Orgill.

Then came the Mayor's race of 1959, young Loeb against Orgill. Mayor Orgill had the full support of the Negro community because he had done much to help them. Loeb had declared himself a segregationist, and had the white segregationist vote solid, but no negro support.

It will probably be argued for years to come, as to who would have won the Mayor's race in 1959. Some say Orgill would have been re-elected, many say Loeb would have beaten him. Loeb is a tall, handsome young man, popular with the ladies, who has made political honesty and independence his bywords. Some say he isn't as able as Orgill, others say he is.

But ill health caused Orgill to withdraw from the race, leaving Loeb virtually unopposed, and the Negro citizens with no candidate. Partee Fleming, a furniture manufacturer,

amateur wrestler, amateur philosopher, entered the race late, and got the Negro vote. However, Loeb drew more than 80,000 votes, about double the Fleming vote, and won the Mayor's position.

Armour and Dwyer remained in the City Commission, the last of the Crumpets, but Stanley Dillard lost to Jimmy Moore, personable former big league baseball player and real estate man, married to a charming and wealthy wife who has not hurt him politically. William W. Farris succeeded Loeb as Public Works Commissioner by getting certain backing because of fear that Russell B. Sugarmon, Jr., brilliant Negro attorney, would win. The race drew more than a half dozen candidates, and Farris lucked out, due mainly to racial discrimination and fear that Sugarmon would win.

Farris, like Orgill, tried for the governorship in mid-term, but he didn't come as close as Orgill to being elected.

The present City Commission has become a five-headed government with no "working majority," and with the Mayor sometimes on the small end of a 4-1 vote. Loeb has found the lonely stand he sometimes left to Edmund Orgill. On occasions, the commissioners have five opinions on a matter. There was a big hassle about building a new stadium, and finally Moore, a minority of one who took the stand that Crump Stadium should not be enlarged, because it would be a waste of money, won his fight against the other four, with the aid of public opinion.

Now it remains to be seen whether or not the city will get a new stadium at all in the next few years.

Economy has been another battle ground. Mayor Loeb has sought to hold down the tax rate, tried to get all to cut their budgets, and vetoed a \$43 million city budget, which delayed its passage a week. The other four divided two and two as to whether or not to uphold the veto, and when it appeared his veto might be upheld, and city finances frozen, Loeb backed down.

But economy in government is bound to be a big factor in the city election Nov. 7, and the people will have the say as to which side was right—Loeb and economy and the others

who wanted enough money to run the city in what they deemed to be a proper way.

It seems likely that Loeb, who aspires to the governorship, will run for re-election as Mayor next November. Commissioner Farris is almost certain to run against him. Commissioner Dwyer could be a candidate. Two of the city judges, William B. Ingram, Jr., and Beverly Boushe, are considered possible mayor or city commissioner candidates. Judge Ingram has been fighting the police department and could run against Armour. Sheriff M. A. Hinds, serving his last consecutive term by law, could run for police commissioner, or something else. He would think awhile before running against Armour, unless Ingram got into the race. He got 90,000 votes for sheriff and claims a good deal of the credit for defeating the consolidation charter.

It should be an interesting election.

And the consolidation charter is something else important to politics present.

There was a strong move for consolidation, with the city and county governments to be one, as an economy and efficiency move. It seemed most of the officials and citizens were for it.

A strong Charter Commission was set up. Perhaps it was too strong. They did not agree. One trouble was that the charter, using the more modern governmental approach, wanted the Council under consolidation all elected at large, some from the city, some from the county. The Negro community, realizing its best chance to elect Negroes to the Council, wanted some Council members from districts.

That was used as an excuse by some of the die-hards who didn't really want consolidation.

Suddenly you found all these people who said they were for consolidation, but not the proposed consolidation charter. Many opposing the charter hadn't bothered to read it.

It was quite a fight in the election last summer. One trouble was that too few understood the charter. It was not really "sold" to the people. Too many in high places just

said it was good, and expected the people to be for it for that reason.

Anyway, the charter lost overwhelmingly in the county and decisively in the city.

Consolidation will come in the future, but just when and how isn't too clear now.

But the people of Memphis and Shelby County are politically free. The old machine, which still has some strength in the county, is losing out. Last election, two new independent county commissioners were elected. The County Court, really an anachronism, is still controlled by the old political machine, with the city not having proper representation. Some interesting political battles are being waged in this arena. The emergence of a strong new Republican Party in Shelby County makes the future seem quite interesting.

Somehow, I believe the people will win out, keep their political freedom, and get the kind of government they demand. We'll just have to wait and see.

FEDERAL AID TO HIGHER EDUCATION

PEYTON N. RHODES

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In our part of the country and, indeed, in many quarters, if one uses the term "federal aid" in polite company there is apt to be a lifting of eyebrows and a bristling of resentment. Rather quickly the conversation gets around to "states' rights," or "The Constitution" though not too many could accurately define what they mean by "states' rights" and none has read the Constitution since high school days. A person mentioning "federal aid" is apt to be put in the class of one who might not be *against* "sin" and not *for* "motherhood" and who is possibly a little weak on the second stanza of the national anthem. Editorials are written about the dangers of "federal aid" to education by people who have done little study on the subject and whose educational background is not impressive. In any case the popular "posture" is to be *against* it.

In this paper I shall not attempt special pleading for or against this allegedly evil practice, devilishly contrived by bureaucrats in the federal government, mostly sent up to Washington by the homefolks, but will try to clarify the meanings of some words and to separate out a number of activities of the federal government in relation to higher education that may or may not be regarded as "aid." In other words, I hope to provide more light than heat in contrast to generally accepted practice.

Until recently there have not been available many data that one could quickly assemble on the matter of the interrelation of agencies of the federal government and institutions of higher learning. However, fortunately for the writer, since the selection of the topic many months ago, there have appeared a number of objective and scholarly studies on the whole matter so that now the problem is not one of digging up information but one of appropriate selectivity and choice in order to present a picture or a series of pictures in a reasonable time. I am greatly indebted to the sources listed in the bibliography which will appear in the printed copy of

this paper, in addition to many short articles from the press, educational journals, and specialized brochures. My subject is a fascinating one, and I would urge those of you who may be interested in pursuing it further to do so by studying several of the listed bibliographical documents.

The term "federal aid" is used loosely to cover any moneys that pass from some agency of the federal government into the hands of the bursar or comptroller of a college or university. There seems to be no great furor about federal funds passing into the states for highway construction, for the paving of streets in cities, for the construction of homes in urban renewal projects, or for the building of hospitals, but if any Washington money trickles into a college for *whatever reason* there are people who think this is very *bad* and that it is apt to lead to "federal control." What is overlooked is that much of the money is in payment of services involving contractual or grant funds for an activity that the government cannot get from any other source because of the peculiar qualifications of the college personnel who perform the services. No one complains if the government contracts with a large corporation for a project in supersonic flight, but if a competent university provides the same service with its faculty and its equipment and gets paid for it, even though it may lose money in the process because of the use of facilities built previously or at the time with its own money, this is regarded by some people as federal aid. Actually, if the government could *not* call on the research facilities of higher education in many fields, science and agricultural programs would be unable to carry on. If one cared to press the point logically, it might be argued that instead of "federal aid" to higher education, we have educational aid to the federal government. However, points to the contrary can be made of the fact that certain favorable relationships with colleges involving rates of interest on loans, the investing of title to research equipment paid for by government funds in the colleges after the project has been concluded, and the donation of surplus property *can* be regarded as aid. I mention these matters at the outset simply to get before us the wide range of meanings that can be attached to this term, "federal aid."

Another point which is often missed in the heat of discussion is that the proper question is not whether we should

have federal aid, since the federal government is by long tradition involved in higher education, but just what its *role* should be now and in the years ahead. The matter of federal aid was settled back in 1777, when the government started the administration of educational programs for military personnel, including the teaching of mathematics, and shortly started aid to territories and subsequently the states by the endowment of schools with public lands. This was quickly followed by the endowment of institutions of higher education with such lands. In the first year of the nineteenth century Congress made an appropriation for books which ultimately turned out to have been the foundation of the Library of Congress, and then in 1802 the Military Academy at West Point became the first completely federal institution of higher education. This is mentioned here simply to show that the involvement of the federal government with schools and colleges is older than the Constitution. The Constitution went into effect in 1789. Of course, what has brought the matter to the attention of the public so strongly now is the tremendous and accelerated pace of "federal aid" in the last two decades, resulting from World War II, and from the great increase in not only the college-age population but also the percentage of that population wishing to attend college. To over simplify, one may say that the defense effort and the necessity of doing something about making provision for the unprecedented increase in college population are the two elements which have brought into sharp focus the whole question of federal aid.

A great deal is made of the fact that the Constitution nowhere makes specific reference to the federal government's participation in higher education and, therefore, that this matter is automatically reserved to the States. It is true that the Constitution does not say anything about education, but one of the listed sources cites the fact that there were "thirty-one provisions of the Constitution under which the Federal Government could find authority for educational actions."¹ Further, there seems to have been in the early days very definite interest shared by James Madison, Thomas Jefferson, and others in the establishment of a national university. It was quickly recognized that a weakness in the Constitution and the tenth amendment was the failure to make any provision for education. At that time what we understand by a

state's interest in education simply did not exist and practically any sort of institution that might have been proposed by either the federal government or by the states would have raised the question of what *church* would be its chief supporter and controlling element. The dual system of American higher education, so familiar to all of us, had not evolved. In President Jefferson's message to Congress in 1806 occurs the following statement, which is worth serious thought: "Education is here placed among the articles of public care, not that it would be proposed to take its ordinary branches out of the hands of private enterprise, which manages so much better all the concerns to which it is equal; but a public institution can alone supply those sciences which, though rarely called for, are yet necessary to complete the circle, all the parts of which contribute to the improvement of the country, and some of them to its preservation." Thus spoke our greatest scientist-president who realized that religious and private bodies at that time had the sole responsibility for higher education in "its ordinary branches" but who proposed that where they had not the strength to carry the total burden there was a role for the federal government. The nearest approach to a national university that so far has developed is really the Smithsonian Institution, accepted in 1867 as a gift of an Englishman, Mr. James Smithson, who in a bequest left funds "to found . . . an establishment for the increase and diffusion of knowledge among men."

Present day opponents of federal aid who really think the matter through base their opposition chiefly on three points: *First*, the seemingly inevitable complications that arise when the federal government carries out any massive operation. Understandably, there must be controls involving careful audits, budget inspections, standardizations of job descriptions, and promotions because it is the peoples' money that is being expended. Inherent in any bureaucratic setup is the possibility that the grinding of the federal mill in itself constitutes a danger. The *second* point of danger is that the federal government might extend its mechanical controls into the areas of curriculum, entrance standards, graduation requirements, etc., of the colleges, a completely disastrous consequence. And *finally* the opponents of federal aid fear, if philanthropy-minded citizens or state legislatures see the federal government taking over the educational job, that they

will relax their own efforts and either save their money or put it elsewhere, thus tipping the scales farther in the direction of centralized federal domination.

Those who favor increasing federal support in one way or another for higher education ultimately base their position on the desperate need of all institutions of higher learning. The American people have always had a great faith in education and nowhere in the world has this faith been so universally fostered as in this country. It is generally felt that any boy or girl of reasonably demonstrated ability should be provided somehow or other with all of the higher education he or she can assimilate. Therefore, attendance at college, in graduate and professional schools is looked on with approval. In fact there is a grave danger that persons who in the future do not have a college education will be ruled out of many occupations and activities.

The major needs of colleges and universities are large sums of money for the payment of faculty salaries and for the construction and maintenance of physical plants. These needs are occasioned by the trends in student population based on our philosophy of education just referred to. There is simply no question about the fact that within the next decade the college population will double over the present four million or so, which in itself is a staggering increase over a decade ago. So the proponents of federal aid see no other source than the federal government for this money. Certainly the states have not generally done anything startling about aid and there has been no careful planning involving both tax-supported and privately-supported institutions within the states except in a few instances, such as in California and in New York. In Tennessee there have been various conferences about building more junior colleges, etc., but no one has taken the trouble to see whether or not the *state* could aid private institutions to expand at a much smaller cost per student than required to build new colleges and staff them properly.

Secondly, the advocates of federal assistance are not unaware of the hazards of centralized financing and possible control. However, the experiences of the land-grant colleges, all tied in intimately with both the Department of Agriculture and the Department of Defense, indicate that public opinion, state agricultural bureaus, and the power of the states has for

the most part kept in check any major evil. The medical schools have all accepted vast amounts of federal funds both for construction and research, and yet it is not believed that the federal government could oppose the recommendations of the Association of American Medical Schools, a very powerful group, in any significant matter. Public opinion is a powerful force. Further, it has been pointed out that in Great Britain where such ancient institutions as Oxford and Cambridge are supported almost entirely (72%) by public funds and where a very high percentage of the students attending these institutions are supported by government scholarships, owing to the organization of the highly respected *University Grants Committee*, there is not detectable any semblance of interference or control of curriculum or administration by Parliament.

In the third place it is pointed out that the states in general have not always shown vast enlightenment in the administration of funds for education or in their concern for the best interests of the institutions they support. In other words, there are those who think that the federal government, which is not very far away from the borders of any state nowadays, due to improved communication facilities, might be a little bit closer to knowing the needs of students and institutions than the state legislatures, which often concern themselves for extended periods with maintaining the *status quo* in everything, and whose representatives are not necessarily more able statesmen than those to be found in Washington. Also a great many of our states, including some each of us could mention in the South, simply do not have enough money to do the job that has to be done. They have the students but not the wherewithal to educate them.

Fortunately, as thoughtful persons have pointed out, one does not have to take an entrenched position on either side of the federal aid for education debate. The issue is not sufficiently white versus black to find a clear dividing line. The main thing is for every citizen to be informed to the maximum extent about the historical development of federal involvement in education and to use accurately, rather than loosely, the facts that can be now readily ascertained in trying to help discover a solution which will take care of the very clear specific and definite needs of the colleges and universities;

namely, better pay for teachers, improved, enlarged, and well maintained plant facilities. If these objectives can be kept in mind, plus the fact that only in the better colleges and universities can there be discovered personnel and equipment to carry out both basic research in all fields and to solve many problems of national defense, some hope of a workable and intelligent solution may be discovered.

With this background, let us look at some of the forms that federal aid or action or support of educational processes or institutions have taken and then we will list several of the possible directions that federal interest in education may be expected to take.

Let me say that this whole matter is of such tremendous national importance that the October, 1962 annual meeting of the American Council on Education, numbering in its membership some twelve to fifteen hundred institutions, associations, and organizations related in any way whatever to the educational process, had as its theme "Higher Education and the Federal Government: Programs and Problems" and every element of federal programs was discussed exhaustively by the most competent people in the country, both in education and in the agencies of the government. It should be borne in mind that almost one hundred percent of the chief people heading these government agencies are former academic people, either college administrators or professors who have been enticed away from the campus for awhile, but many of whom return to administration or teaching after relatively short periods. In other words, unless the taint of bureaucracy infects people quickly and deeply, the educational point of view is never lost.

The types of federal involvement with institutions are basically six:

(1) The creation of and aid to land-grant institutions established by the first Morrill Act in 1862 and strengthened by the second Morrill Act in 1890. It is assumed that members of The Egyptians are familiar with so-called land-grant colleges, in commemoration of the establishment of which a special stamp was issued last year by the Post Office Department. In 1914 further funds were added in support of home economics. These grants have been to the states rather than directly to institutions. It appears that land-grant institutions have never suffered seriously from any efforts at federal con-

trol, possibly because of the existence of State Farm Bureaus and the closely knit organization of the Directors of Agricultural Experiment Stations. It is true that the ROTC units, connected with all land-grant colleges and later with others, are closely supervised by the Department of Defense.

It is interesting to note that the Morrill Land-Grant Act of 1862 placed no restrictions or limitations upon the institutions to be created by the Act. The authorizing legislation did not require that the beneficiary institutions in existence or new institutions created as a result of the Act be *public* institutions. As a matter-of-fact the Massachusetts Institute of Technology and Cornell University, generally regarded as private institutions, even at the present time receive funds under the Morrill Act or related subsequent legislation. Yale University and Brown University were in on this originally but later dropped out of the program. An important fact to be noted is that up to now, with one doubtful exception involving the PWA administration program during the depression, Congress has never made any distinction between public and private institutions, church-related colleges being included under the term private institutions, in dealing with higher education. Only in the last two Congresses has the church-state matter been dragged out to becloud the basic issues in proposed legislation.

As late as 1961 federal funds to land-grant colleges totalled only about five million dollars a year which represented about half of one percent of their current aggregate income. Such sums were a minute factor in the budgets of institutions like Cornell, Purdue, and the University of California. The Eighty-sixth Congress, by the passage of Public Law 658, upped the amount to be put into the land-grant colleges to approximately fifteen million dollars. In 1962 these colleges received one hundred million dollars, exclusive of research contracts.

(2) Federal aid in military training. In addition to the ROTC programs set up in 1920 and following in general the pattern of military training given in land-grant institutions, we have seen the establishment of the Naval Academy at Annapolis, the Army Medical School, the Army War College, the Coast Guard Academy, the Naval ROTC (1925), the National Youth Administration with military overtones, the Civilian Pilot Training Act, the Armed Forces Institute, the Army Specialized Training Programs at colleges and universi-

ties during World War II, the "regular" Naval Reserve Officers Training Corps, the Air Force Academy, the Air Force Institute of Technology, etc. Many of these institutions of the military award degrees just as do duly accredited four-year colleges and universities.

(3) The free education of veterans under the "G.I. Bill" (Public Law 346). The federal government spent almost fifteen billions of dollars to send nearly eight million veterans of World War II to colleges or vocational training institutions. Public Law 550 for Korean War veterans to date has provided educational aid for about a million and a half individuals. In the application of neither law was there any aid to education insofar as the institutions were concerned. A very high percentage of the better institutions suffered severe financial setbacks as the result of the veterans, whereas a number of poor ones and some "ad hoc" vocational training schools, particularly under the "G.I. Bill," made money, and there were a good many scandals involved with this type of so-called educational institution. The trouble with the veterans' education bills has been that they do not take into account the fact that it costs a great deal more to educate a person than is represented by the charge made for tuition. People do not seem to be able to get this through their heads. Just why it has become the custom in America to price an educational service at about 50% of the cost is a long story and would require a separate paper to develop, but such is the case. When total educational costs are borne by the taxpayer, except for about 8 to 10%, as is the case with tax-supported institutions, the cost to the student is low, but in privately-supported institutions, where the student is charged 50% or 60% of his educational cost, the charges seem very high. At the end of World War II when college enrollments were down, there was nothing for the colleges to do but to accept veterans whose tuitions were paid by the government and many of these veterans were serious and highly motivated students. On the other hand all educational costs above the tuition received from the GI had to come out of some other source of funds and since generally speaking there was a great increase of enrollment over pre-war standards, these other sources of funds were inadequate. The general public has never understood this and may never do so. Of course, there was some "federal aid" by the provision to the colleges

of surplus buildings from Army camps and hospital installations and of surplus equipment from the military. This was definitely badly needed aid. Further, the amendment of the surplus property provisions to permit colleges, hospitals, and other non-profit institutions to receive, at modest or no cost, all sorts of materials declared surplus by operating agencies of the government, not just the military branches, has been a tremendous help to those institutions with personnel competent to appreciate the utilization of parts as well as total equipment. Although the science departments have profited most from this, there have been made available to colleges everything from tarpaulins to beds, from shovels to drugs. As might be anticipated, the handling of such vast amounts of materials has involved many mistakes, and from time to time when some Congressman wishes to get a little local publicity he delves into the matter of the waste of government surpluses when he is not talking about over stock-piling of critical materials. However, the waste, percentage-wise, involved in dealing with the colleges is practically microscopic. At Southwestern we have used to good advantage nuts, bolts, drift pins, raincoats for campus workers, sheet aluminum, brass and steel, optical parts of all kinds, antiaircraft gun mounts, trucks, chemical glassware, and chemicals, and we have equipped probably the finest instrument and machine-shop in any college in the country from surplus milling machines, lathes, drill presses, etc. All of this is certainly federal aid whether it be good or bad, and we are greatly strengthened as a result of it. I should add that in the State of Tennessee the whole matter of surplus property, in my opinion, has been handled efficiently, objectively, and intelligently by the State Agency for Surplus Property located in Nashville. All types of higher educational institutions, hospitals, and public school systems have profited therefrom.

(4) Grants and contracts for research and development. This is where the real money goes both in projects related primarily to defense and in experiments of a basic research nature. Involved are such additional agencies as the Public Health Service, Atomic Energy Commission, National Science Foundation, and about a dozen others. As Dr. Vannevar Bush pointed out, World War II was "the first war in human history to be affected decisively by weapons unknown at the outbreak of hostilities." It was not immediately clear that

this would be so. In 1936 when the United States realized belatedly that another war was not necessarily out of the question and began to do a bit of modest rearmament, one of the first things that the Army did was to *cut* its modest budget for development and research. The reason was "the amount of funds allocated to research and development in former years is in excess of the proper proportion for the item in consideration of the rearmament program."² Everyone is familiar with what happened later and the United States had to go into a number of crash programs. By the end of the war practically all of the nation's research scientists and major universities where basic scientific research was well established were involved with projects financed directly or indirectly by the federal government. Had it not been for these universities and scientists, in all probability, we would not be meeting here tonight.

It may not be generally known that the Germans were well along in atomic fission development under the leadership of Werner Heisenberg and other top level physicists, but who fortunately were directing their energies in a way which proved non-productive. By rare good fortune, due to the escape of a woman physicist, Lisa Meitner, to Denmark; and later on to the late Niels Bohr, a distinguished Danish physicist, whose eminence was sufficient to get him a hearing in this country, and finally through Dr. Einstein to President Roosevelt, after many, many months of delay and frustration, we seized the initiative. At any rate there evolved in 1940 the National Defense Research Committee, headed by Dr. Bush and directly responsible to the President. This changed into OSRD, the Office of Scientific Research and Development, which made the decision that has brought up a large part of the worry about federal aid. This decision was to develop scientific defense activities by means of contracts and grants to universities which already had many of the needed facilities rather than to start afresh and build government-owned facilities. Subsequently, there has developed a sort of intermediate situation in which, because of the staggering sums of money involved, the government provides the money for certain types of research facilities but contracts with one or more universities to staff and operate them. For instance, the Radiation Laboratory at Massachusetts Institute of Technology is government-financed and government-owned and has

about 4000 employees. The University of California and the University of Chicago, with superb research facilities already available, were pressed into service, even at the risk of criticism, since time was of the essence.

It does not take much imagination to realize the difficulties that these operations brought about for both the government and the universities. The matter of faculty salaries, always a sensitive point, immediately arose. The people in the humanities did not like to see the scientists better paid and occupying the stage, even though they knew the war had to be won as a result of scientific effort. When enrollments in colleges dropped off due to the service of students in the military the OSRD had to take over the payment of salaries of many scientists but was not much worried about professors of Latin. Then the matter of indirect and overhead costs came up and how much to depreciate that part of the physical plant used for war research, etc., etc. Indirect costs are hard to measure and there still has not been evolved any satisfactory formula for settling the matter. It depends on who does the figuring. At the present time grants from the National Institutes of Health allow 15% of certain items of the grant to be included as an extra for overhead. The National Science Foundation has recently raised its overhead percentage from 20% to 25%, but in these two cases the overhead is calculated in a different way. Contracts with branches of the Air Force allow various amounts for overhead, depending on the situation. At present Southwestern's Air Force contract, operated through the Cambridge Laboratories, carries a 25% overhead factor but always with the provision for renegotiation. It is amazing how tight the federal government is with educational institutions down to the last penny, whereas with some electronics or aviation organization, it will enter into a very loose cost-plus project involving tremendous sums and be willing to accept heavy losses if the project is unsuccessful.

Although I am not aware of the availability of any entirely accurate figures on how much "government" money was spent on research projects carried on by universities during World War II, in fiscal 1944 OSRD alone made contracts with universities totalling 90 million dollars and OSRD was just one of several agencies making such contracts. This, of course, is

hardly a respectable bookkeeping item at the present time, but was large compared with the 28 million dollar total estimated to have been spent by all institutions of higher education in research in the natural sciences in 1938, just before World War II started.

It is difficult to keep up from day to day with accurate figures either on government expenditures for defense, which may or may not involve research and development, or on total research expenditures or research expenditures in connection with institutions. One has to analyze very carefully the figures appearing in the press. They are often somewhat loosely stated and their purpose or agency relationship not clearly defined. However, *Science News Letter*, a highly reliable publication, published by *Science Service*, a non-profit corporation but closely allied with the National Research Council and National Academy of Sciences, carried in January, this item which is believed to be accurate to a high degree:

"Almost one-third more will be spent for research and development by the Government during the fiscal year ending June 30, 1963, than in 1962."

"Nearly \$14.7 billion is being invested in military, space, atomic energy, health and welfare during the year ending June 30, 1963. Of this, an estimated \$4.5 billion is for research, \$8.5 billion for development, \$1.6 billion for facilities and \$100 million for scientific and technical information.

"The spending figures were obtained from a survey by the National Science Foundation, in cooperation with other Federal agencies, of 27 agencies. Four of these—Department of Defense, National Aeronautics and Space Administration, the Atomic Energy Commission and the Department of Health, Education and Welfare—account for 95% of the total estimate for fiscal 1963 research and development."

"About four-fifths of such Federal funds are for support of work outside the Government." Of the 98.8 billion federal budget proposed for 1964, 14.9 billion is allocated to science and technology, of this 6.1 billion is for space research.

Of course, it has already occurred to you that the involvement of the science and mathematics departments and even the economics departments of colleges and universities with

federal research projects brings up many problems. Does one allow the researchers to make extra money or does one reduce his teaching load to enable him to take on government research or basic research supported by the government? Since scientists, mathematicians, and economists are in short supply, how can one maintain faculty salaries on an equitable basis and still pay scientists as much as the government itself is willing to pay them at such installations as Redstone Arsenal, which will start out almost any young Ph.D. physicist at \$10,000; or how do the colleges compete salary-wise in the sciences with private business carrying on government contracts on a cost-plus basis, which permits almost any salary to a scientist? These are just several of the problems.

In 1961-62 the government spent approximately one billion dollars on research and development in universities and university-operated laboratories. About 71% of this was in the physical sciences and mathematics, 26% in life sciences, 2% in psychological studies, and 1% in social sciences. The National Science Foundation is 100% concerned with basic research, that is the kinds of things that professors would like to be doing any way if they had the time and the money for equipment. About fifty government agencies are making grants or contracts, but of the approximately 2000 educational institutions above the high school level in the United States less than 500 get any research funds, two-thirds of all funds go to 25 institutions, four-fifths to 50 institutions, and 95% to 100 institutions. Most of the colleges and universities getting grants are the strong New England private institutions, large state universities in the Mid-West, and both the public and private colleges on the West Coast. These are the institutions that normally give the most doctorates, have powerful departments in the sciences, have a plentiful supply of post-doctoral fellowships and distinguished faculties who may serve as consultants. As might be expected the strong get stronger and the weak get weaker. For the most part there is very little distinction between a grant and a contract, except that in the case of grants any equipment purchased to carry out the proposed research remains the property of the institution with which the researcher is connected, whereas in the case of contracts the title to equipment bought remains with the contracting agency. However, there is reason to believe that if such a contract is terminated the institution

may acquire the equipment at no or little cost. Here again the institution is certainly being "aided" by the federal government.

One more emphasis in this connection is important. When it gets to the point that the government supplies 50% to 80% of the money spent on research in many of the large universities, if these grants and contractual relationships were suddenly terminated, the institution might conceivably be put out of business, just as a sudden cessation in the expenditures for the total defense might produce in the country a grave depression. It may well be that we can neither afford to be at peace as a nation nor afford to withdraw the federal government from the support of research in colleges and universities. The great danger is that the universities as seats of learning will short-change themselves and forget, in the words of President Pusey of Harvard, that "a university will serve society well only as it remains true to its essential nature, that is a university, not an agency of government." Only a powerful university can keep available sufficient uncommitted money to be able to say "no" to any federal proposal that it does not wish to accept.

(5) One federal program relating to colleges that seems to have met almost universal approval is the College Housing Loan Program. Although it can surely be argued that the provision of funds to colleges for residence halls and eating facilities, that is, self-liquidating projects, at an interest rate on loans approximately 2% less than the prevailing rates charged by banks and insurance companies, involves a considerable element of aid, yet no one can deny that these loan funds have been well administered and have served to provide housing for students who could not possibly have otherwise been cared for by the institutions. The total amount of loans as of June 30, 1961, was \$1,363,183,000.00 and involving 900 or 70% of all eligible institutions in ten years of operation. At the present time over two billions have been approved. One out of every three students in college dormitories lives in a building financed by this program. There has been no instance of the failure of any college to meet fully and on time its payments on the loan. It should be stated that the legislation on loans to colleges was not handled in the same way as research, but was adroitly slipped in a larger

omnibus bill which was politically acceptable. Thus, there has developed little opposition to this type of educational aid.

"The College Housing Loan Program rests on two debatable propositions which are now part of its structure. The first is that, since the program is for assistance in the construction of non-academic facilities, it should not be considered as a program in aid of education but rather as a housing program. The second is that a loan is not an aid to education—and hence not to religion—whereas a grant is. Both of these are fairly transparent disguises—imagine the ordinary college or university without dormitories—but both have been remarkably successful in doing the job for which they were designed." Thus, it was possible to avoid the church-state or first amendment question with a sort of underlined assumption that if aid is in the form of a loan which must be repaid then this is not support for the higher educational institutions of any religious body even if the rate of interest on the loan is below prevailing rates; or as someone said, "In church colleges it is all right to provide a place for students to sleep but not a place for them to learn."³

(6) The final aid program I shall mention, though there are others, is the matter of technical assistance to foreign countries involving engineering, agricultural and developmental matters of many kinds. An agency called The International Co-operation Administration supervises contracts with fifty or sixty colleges and universities operating teams of specialists in about forty countries. The amounts of money involved here are not great but the absences of faculty members from the campus has been disruptive and the matter of the type and amount of compensation to the institutions and their representatives has been the subject of considerable disagreement with the federal agency. It is not known to what extent the inauguration of the Peace Corps is or will be related to these technical services.

This concludes the innumeration of the major interests of the federal government in higher education; that is, areas of contact between the government and institutions. One will have to judge for himself just what has been direct "aid," what has been payment for indispensable services, what has been encouragement of a somewhat one-sided emphasis on the improvement of scientific work in institutions. One will

also form his own opinion about whether institutions, as places of instruction rather than buzzing research organizations, have been helped in their essential and basic traditional functions. The recent announcement of President Kennedy's proposals for education leaves most people with mixed emotions for they are closely tied in with the matter of tax revision. Certainly, the tax limitations on deductions from income given to educational institutions, churches, hospitals, and the like seem to be diametrically opposed to encouraging some of the aid features which he has suggested. However, without going into the details of the President's program, it would appear that the most likely directions in which the federal government may demonstrate its interest in and concern for higher education will be among the following:

1. Direct grants, matched or unmatched, and loans for the construction of buildings other than self-liquidating facilities. This would involve laboratories, libraries, classroom buildings, gymnasiums, etc. It is generally admitted that once a contract or grant is worked out for plant facilities and the construction concluded, there is very little chance of government interference in their operation as long as the college meets its part of the agreement, which may be raising the matching funds or paying the annual installments on loans. Medical school construction has come to be accepted as a routine matter, and the writer is not aware of any control complications other than the rigidity of the initial paper work. The problem that will arise is whether there will be any change from the traditional pattern of equal treatment for both tax-supported and privately-supported and church-related institutions.

2. What the colleges need even more than buildings is money for operating funds and most of these operating funds involve increased salaries for teachers. This really means specific lump-sum subsidies to the colleges and there immediately arises the question of the basis on which such sums could be allocated and whether or not there would be dragged into the picture the red herring of subsidies by the federal government to colleges related in any way to religious denominations. This matter was what killed action on grants and loans for capital outlays in the last Congress, although in the past whatever has been done in higher education for one type of institution has always been done for the other. *The emphasis has always been on the higher education, and not on who or*

what ultimately controlled the policies of the college. Of course, as mentioned earlier, Great Britain has its Grants system and gives direct subsidies to Oxford, Cambridge, and other universities. The Scottish and some Canadian universities are supported in the same way and apparently feel no sense of frustration or restraint in their operation. However, it would appear that direct monetary grants to colleges are the most likely way in which some sort of federal control might manifest itself. This would ultimately demonstrate whether such *federal control* would be more useful to the educational activities of the institution than whatever type of control it now has.

3. A third way, and the one which goes exactly against the recent tax proposals of the President, is the matter of tax incentives for giving to education. This would appear to be the method of encouragement least likely to permit of any federal control whatever in any type of institution. Greater income tax credit on gifts, credits against income or taxes of sums paid for college tuition and the like would have beneficial effects for the colleges but would not have *major* effects. Let me stress the fact that what the colleges need, tax-supported as well as privately-supported, are more buildings properly maintained and more money for salaries, and we are talking of money of the order of at least three billion dollars a year for the next decade and more annually thereafter.

4. A fourth so-called aid to colleges consists of scholarships for individual students. This is a devastating sort of support. It puts additional drain on the institutions and does not meet the two fundamental needs. The only scholarship programs that have even a minimum of effectiveness, insofar as strengthening the institution goes, are those in which an additional sum is given directly to the institution and of a magnitude approximating the amount of the scholarship grant given to the student. Only in this way can the institution stay even. Let me emphasize that people who feel like helping some poor deserving boy to go to college weaken their aid provision for this student by putting an increased burden on the institution to which he goes, thus lowering the quality of the education provided for the student. Ultimately, the institution is prevented from providing for the student what he came there to get.

In all of the above relating to the strengthening of the colleges themselves, nothing is more important than producing a large number of increasingly well-prepared teachers for all levels of instruction. Everyone will admit that we need such people and it is rather generally conceded that the so-called teachers' colleges, now mostly changed to state colleges without the word *teacher* or *normal* in their titles, cannot do the job. Therefore, many people are willing to give a bit in their opposition to education involvement with the federal government if some way can be found to accelerate the production of teachers. About the only way to do this seems to be across-the-board aid to colleges, and I would predict that the present Congress, like the last one, will not make too much headway in solving the problem.

I have no quick solutions to offer. I believe something effective can be worked out in the matter of academic facilities and possibly some acceptable provisions can be achieved for the encouragement of both quantity and quality of personnel entering the teaching profession. The outlook for increased operating funds for colleges is very cloudy. However, in this connection two evident things can be done. First, the colleges can be fully and completely reimbursed for all services and activities they undertake for the federal government, such as research, special projects of any kind, ROTC and defense-related activities. To the extent that the government fails to pay such costs just as it would to any prime contractor for the production of either war or peace-time materials, so much does it force the institution into expending its own meager funds as a partial subsidy of a federally determined project. Inevitably, this decreases the salaries of the faculty.

Secondly, the federal government can make adjustments in the tax program to encourage generosity on the part of individuals, businesses, and foundations towards increased support to all forms of higher education. When one comes down to it, the objectives of tax-supported education and privately-supported education are essentially the same and what the American people should be interested in is more education of higher quality at all levels for more people. The main question to keep before the Congress and the executive branch of the federal government is that whatever it does there should be *an unswerving recognition of the importance*

of the teaching profession and of higher education as a national asset.

The American people respect and do lip service to higher education but they have never really dug into the matter and the public understanding of what is involved is lacking to a large degree. Further, there is not great reason to believe that the members of Congress, heads of federal agencies and state legislators, or key executives are in agreement as to a philosophy of American higher education and its role in society. Nor can I say that the leaders in American higher education, such as college presidents and key faculty members, have exerted their best efforts to keep the public informed. It is true we are a young country and possibly have not settled down to a steady state as yet. On the other hand a crisis is upon us and we cannot wait to grow up. What we may need is a crash program such as that used to produce the atom bomb. For what now seems to be an insignificant sum of money there was a dedicated and almost superhuman effort by a few outstanding scientific leaders and many equally dedicated workers, which produced in a very short period the means of ending a war. There is no reason to believe that with equal dedication and funds a solution could not be achieved in the field of higher education as well as in pre-college education.

It is true that periodic attempts have been made to formulate public policy in education. Even when the relations of the federal government to higher education were relatively simple, there were from time to time commissions and committees appointed to look into the matter of federal activity in education. For instance, the National Advisory Committee on Education in its report to President Hoover in 1931 said, "The Federal Government has no inclusive and consistent public policy as to what it should or should not do in the field of education. Whatever particular policies it seems to be pursuing are often inconsistent with each other, sometimes in conflict. They suggest a haphazard development, wherein policies of far-reaching effect have been set up as mere incidents of some special attempt to induce an immediate and particular efficiency. Without a comprehensive, forward looking and coherent public policy in regard to education, the present educational situation in the federal gov-

ernment cannot be greatly improved." This is just as true as it was a generation ago.

A committee on higher education was appointed in 1946 by President Truman under the chairmanship of the late Dr. George F. Zook, who was then President of the American Council on Education. A commission was charged with "a re-examination of our system of higher education in terms of its objectives, methods and facilities" and "an examination of the functions of higher education in our democracy and of the means by which they can best be performed." Ultimately, a report was prepared which was unacceptable both to the academic people and to the Congress and very little came of it. While this commission was still deliberating, the eightieth Congress passed Public Law 162, which provided for the appointment of what came to be known as the Hoover Commission, which was to look into almost everything. Naturally it became involved in the matters of federal education. The educational task force of the Hoover Commission made many recommendations including that of the establishment of a Federal Education Agency, which was to coordinate all federal activities in higher education. The Hoover Commission's effect on higher education was practically zero for it refused to accept even the recommendations of its own subcommittees. In 1956, President Eisenhower appointed an equally distinguished Committee on *Education Beyond the High School*, under the chairmanship of Devereux C. Josephs, to make a study as comprehensive as the title of the Commission. The chief recommendations of this were an experimental work-study program designed to aid a few college students (not the institutions they were attending) by work grants, and it advocated that federal income tax laws be amended "in ways which will permit deductions or credit on income tax returns by students, their parents or others who contribute to meeting the expenditures necessarily incurred in obtaining formal education beyond high school."

In mid-1957, the Josephs Committee's report went into the Department of Health, Education and Welfare, so that legislation could be prepared to implement it. Probably nothing would have happened had not Sputnik I appeared in the heavens and caused to be produced an avalanche of bills in Congress for federal programs to strengthen American education—especially science education—not because of a national

policy for education as a whole but largely as a defense effort. Thus, came about the National Defense Education Act, signed by President Eisenhower on September 2, 1958, the National Defense Student Loan Program, and subsequent legislation with which most people are generally familiar, all leading up to the recent proposals of President Kennedy, many of which undoubtedly will, and probably should, go down the drain as usual. Legislation has to be politically feasible as well as philosophically acceptable.

A great many people who seem very keen on keeping a clear line of demarcation between tax-supported institutions and privately-supported ones speak with great enthusiasm of the good old private enterprise days of the colonial colleges, all but one of which was started by a church. "Speaking in 1873 against the creation of a tax-supported national university, President Eliot of Harvard advanced the argument that 'our ancestors well understood, the principle that to make people free and self-reliant, it is necessary to let them take care of themselves, even if they do not take quite as good care of themselves as some superior power might.' Had this principle actually been well understood by Mr. Eliot's ancestors, there would have been no Harvard and no presidential office for him there to use against the principal of government-financed higher education. On over one hundred occasions before 1789, the General Court of Massachusetts appropriated funds for Harvard College which clearly was not capable of taking care of itself. Indeed Harvard, Yale, and Columbia could not have survived the Colonial period without support from the State. Very important to Harvard was the \$100,000 which the Commonwealth gave in annual installments of \$10,000 between 1814 and 1823. In the case of Bowdoin and Williams, each of which received \$30,000 as a result of the same legislative act, state aid underwrote whatever solvency the two institutions attained during that period."⁴

President Eliot had not read much about the history of higher education in the United States. Where the States could not provide funds directly, they often granted permission for lotteries to benefit the institutions, both sectarian and non-sectarian, and, of course, all were what we would now describe as private colleges.

In conclusion let me reiterate the obvious; namely, that unless a massive effort is made to inform the American people

with great clarity of the nature and problems of American education, we will continue to flounder aimlessly in confused and ineffective efforts. I would be among the last to be willing to give up the individuality of a single institution, either private or public, for herein rests the great genius of what has already been accomplished in American education, but the public at large must be impressed with the *totality* of the educational effort and they simply are not. The American public does not realize that our society requires the "maximum development of individual potentialities" and that there is a vast economic loss to the country when possibly half of the young people competent to do college work are not enabled to attend college. Further, the American public simply does not understand the fact that higher education costs a great deal of money, not nearly so much as our current defense efforts but vastly more than the average person has thought of in connection with education. Not only must the public come to realize the cost but some way must be found to convince them of the necessity of getting together the money. The most conservative estimates would require not less than three billions *a year additional* money for higher educational expenditures toward operations and capital outlay up until 1970. Further, not many Americans know the difference between good college education and bad college education. Parents and students pick the colleges they would like to deal with on the basis of casual hearsay, a current teenage popularity trend or because Uncle Joe greatly respected Professor X when he attended Old Sawbuck forty years before. The average American can tell the difference between a good road and a bad road, a good automobile and a bad automobile, a good house and a poor house, but he has given very little thought to what constitutes a good education or a good educational institution. A better informed public is basic to the whole task of strengthening our educational system at every level. Curiously, also the same people who strive to get their children in what they regard as the "best" institutions are always alert and ready to be critical of institutional operation. Let a college professor, student, or a public school teacher express orally or in print some idea with which a patron or fellow citizen does not agree and a great hue and cry is raised about the virtues of the institution that permits such an individual to remain on its staff; yet this same parent or

citizen would defend with great vehemence and even violence his own right to sound off on any subject. American people have got to get over being childish about education and really grow up to the fact that far transcending the conquest of disease or of space is the matter of settling in the very near future what they wish to be the nature of American higher education.

I conclude, in accordance with acceptable ministerial practice, for the second time, with the closing words of a summary of a discussion by the Trustees of the Carnegie Foundation for the Advancement of Teaching, "if the American public does not understand what its colleges and universities are about and is not willing to learn, nothing can save them."

- ¹ The Federal Interest in Higher Education—p. 17
- ² The Role of the Federal Government in Financing Higher Education—Alice M. Rivlin
- ³ The Federal Interest in Higher Education—p. 140-141
- ⁴ The American College and University—p. 185

BIBLIOGRAPHY

- (1) The Federal Interest in Higher Education—Homer D. Babidge, Jr., and Robert M. Rosenzweig (McGraw-Hill, 1962)
- (2) The Role of the Federal Government in Financing Higher Education—Alice M. Rivlin (The Brookings Institution, 1961)
- (3) The Effects of Federal Programs in Higher Education—A Study of 36 Universities and Colleges—Harold Orlans (The Brookings Institution, 1962)
- (4) The Federal Government and Higher Education—Participants' Study Book of the American Assembly, 1961
- (5) A Survey of Federal Progress in Higher Education—Summary (U. S. Department of Health, Education and Welfare, Office of Education, 1962)
- (6) Federal Programs in Higher Education—Summary of a Discussion by the Trustees of the Carnegie Foundation for the Advancement of Teaching in 1957
- (7) Higher Education and the Federal Government—Programs and Problems. Addresses presented at the forty-fifth annual meeting of the American Council on Education in October, 1962
- (8) The American College and University—A History, Frederick Rudolph (Knopf, 1962)
- (9) Higher Education and the Federal Government—A Selected Bibliography Prepared by the Federal Relations Staff of the American Council on Education in 1962
- (10) Higher Education and the Washington Scene—1963, John T. Wilson (The University of Chicago, 1963)
- (11) Financing Higher Education 1960-70 (McGraw-Hill Book Company 50th Anniversary Study, 1959)

AGING

A Review and Speculation

STANLEY J. BUCKMAN

Read before "THE EGYPTIANS," March 21, 1963

Almost as old as man himself has been the desire for that potent elixir, a few helpings of which would restore the bloom of youth to those from whom it had departed. Certainly the elixir has taken many forms. The breath of a young woman, the blood of young people, brews of many types, serums, transplanted sex glands, royal jelly, and yoghurt are some of those which have been tried. It is not the purpose of this paper to review the results of such approaches, however interesting some might regard speculations about the influence of the breath of young women. On the contrary, this paper starts with the recent comprehensive reviews edited by Birren¹ and Shock¹⁰. It attempts to consider the information presented in these formidable assemblies from a biochemical viewpoint only, and particularly to check it against a similar attempt by Bjorksten in his paper of about a year ago entitled "Aging: Present Status of Our Chemical Knowledge."² Moreover, it is limited to certain broad, overall biochemical considerations rather than discussions of the behaviour of individual organs or systems, however important the latter obviously may be.

Shock has proposed ten criteria as follows for testing theories of aging:

1. The probability of death increases logarithmically with age, whereas measurements on functional capacities decline linearly with time.
2. Longevity is related to genetic characteristics.
3. Males of most species show shorter life spans than females.
4. Life span can be influenced by changes in diet.
5. In poikilothermal animals, life span is shortened by increasing the environmental temperature.
6. Exposure to nonlethal doses of radiation shortens life span.

7. The rate of change with age differs among different organ systems.
8. With increasing age, there is a reduction in reserve capacities as indicated by the reaction of the individual (or organ system) to stress.
9. Age changes are greater in total animal (or organ) performance than in intracellular biochemical processes.
10. Age changes increase with the complexity of the performance measured.

Bjorksten² proposes that the following three additional criteria should be used to test any theory on aging:

11. Loss of elasticity on aging.
12. The theory should be consistent with Szilard's data showing that aging is essentially a random process.
13. The theory should explain the acceleration of aging which takes place in uncontrolled diabetes.

Starting with these criteria for testing theories of aging, Bjorksten reviews the chemical theories which he feels have some factual basis. Briefly, these are:

1. The "clinker" theory which is based on the proposition that undesirable metabolic reactions gradually result in the accumulation of insoluble, nonfunctional or noxious byproducts of metabolism. "Lipofusins age pigments," which increase in many different kinds of cells with increased age, are the most obvious manifestations of such accumulations. Whether these pigments accumulate in sufficient amounts to account for aging is, of course, debatable. Bjorksten feels as though this is doubtful. However, it seems the "clinker" theory is broad enough to encompass any type of frozen metabolic pools produced by any reaction mechanism including cross-linking which Bjorksten stresses, as will be noted later.
2. The genetic theory is based on the premise that somatic mutations result in the production of inferior cells. While mutations do occur, the genetic theory alone does not fit with a number of facts including the observation that aging is accelerated by overfeeding the

organism. This conclusion is further reinforced by the work of Dr. Peter Alexander of the Chester Beatty Research Institute in London, England. He presented a paper in March of 1962 at the Unesco symposium under the title "Cellular Basis and Aetiology of Late Somatic Effects of Ionizing Radiations." Dr. Alexander reported that mice given a non-cross-linking, mutation-causing substance did not have an appreciably reduced life span, while a similar administration of cross-linking agents caused a marked reduction.³

3. The thermal denaturation theory is based on the immobilization of proteins by slow thermal denaturation. As Bjorksten points out, proteins denatured by heat are readily attacked by enzymes, and it thus does not seem probable that a reversible change of this type could be responsible for aging.
4. The chemical cross-linking theory is based on the irreversible immobilization of proteins and nucleic acids as the result of reaction with cross-linking agents. This finally results in a frozen metabolic pool of such size that there is inadequate space for sufficient numbers of active life sustaining molecules. Bjorksten feels as though the cross-linking theory makes sense chemically and is compatible with Shock's ten criteria as well as the three added by him. His comments are convincing and the reasons he gives for cross-linking can be briefly summarized as follows:
 - a. It is the only reaction known by which a large change in the physical and chemical properties of two giant molecules can be caused by a single small molecule.
 - b. Agents which will cause cross-linking have been proven to be present in blood and serum and thus are accessible to react with the protein and nucleic acids that are present in all living protoplasm.
 - c. Increased accumulations of cross-linked material with aging have been observed with particularly conclusive evidence in the case of the most thoroughly explored protein, collagen. With increased

age, the elasticity and swellability decrease and the molecular weight of collagen increases. All of these changes can be explained by cross-linking, and it has been shown that thoroughly cross-linked protein cannot be broken down by the common proteolytic enzymes.

To further support this general line of reasoning, Bjorksten in a recent paper³ reviewed results of work on a unicellular organism by M. Rudzinska of the Rockefeller Institute. This work was with *Tokophrya*, which is a quite highly organized protozoan. Rudzinska found that insoluble material with a protein reaction accumulated within the cell of this organism as it aged. In addition, rate of accumulation of the insoluble proteinaceous material increased with an increase in the food supply above normal and the life span was reduced. In contrast to the results with overfeeding, a meager diet and intermittent starvation materially increased the life span of *Tokophrya*. Thus, the results for a single celled organism parallel those observed by different workers for mice, rats, trout, and man. A meager diet prolongs life, while overfeeding causes a shortening of the life span.

What do Bjorksten and others see as an approach to overcome the cross-linking which they view as at least one of the basic chemical mechanisms whereby we age? One possibility would be an enzyme which would break down the nonfunctional aggregates that accumulate in our cells. Some soil bacteria must have the capacity to produce such an enzyme, or we would have accumulated on earth large amounts of insoluble protein-containing aggregates. In our laboratories, we have obtained an isolate of a bacterium, *Flavobacterium marinum*, from a paint film which had the ability to liquefy freshly polymerized (cross-linked) films of linseed oil. Under proper growth conditions, it may be that this bacterium could be induced to produce an enzyme or enzymes which would break the cross linkages involved in aging. Moreover, as Bjorksten states, it would not be necessary for the enzyme to specifically break the cross-links. It would be effective for the enzyme to break down the cross-linked molecules in any way which would reduce them to small excretable fragments. Such an enzyme would be administered at a slow rate so that any attack of normal proteins would be of no consequence. These

would be replaced by normal synthesis while the cross-linked proteins and nucleic acids were being gradually eliminated. As this process continued, there would be a gradual restoration of a higher proportion of functional molecules in our cells and in turn a gradual rejuvenation of the organism as a whole.

Enzyme preparations are available for various therapeutic purposes. The oldest use is as an aid in the digestion of food. However, other uses have been receiving much more attention recently. Some of these uses are:

1. Reduction of inflammation, swelling, and discoloration in sprains, fractures, bruises, and post operative conditions.
2. Intensification of antibiotic effect on localized infections by increasing the normal rate of digestion of fibrin walls enclosing wound areas and by increasing cell and tissue permeability.
3. Clearing respiratory disorders by helping to liquefy mucus secretions.

Topical, oral, and parenteral administrations have been employed to achieve these benefits, depending upon the nature of the individual case. Perhaps you have seen pictures of a youngster, or even an oldster, taking an enzyme pill as a means of speeding the loss of discoloration from a black eye.

One would not expect topical application of an ointment to be of appreciable benefit in the use of an enzyme approach to the control of aging by the breaking down of insoluble aggregates into excretable fragments. Repeated injections of an enzyme preparation over an extended period of time also are not the most pleasant thing to contemplate, even though sensitization problems were not encountered. Oral, or possibly rectal, administration probably would be the only practical routes. This, of course, raises the question whether orally or rectally administered enzymes reach the bloodstream in an active form and in significant quantities in relation to the amount administered. A paper presented at the American Chemical Society meeting in Cincinnati, Ohio, in January of this year provided experimental evidence to the affirmative. A team of workers from the Denver Chemical Manufacturing

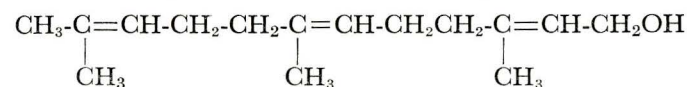
Company of Stamford, Conn., and St. Vincent's Hospital of New York City reported such results for chymotrypsin.⁴ In human studies, a single dose of 80 mg. of chymotrypsin administered orally in the form of enteric-coated tablets and a single dose of 25 mg. of chymotrypsin administered intramuscularly produced a comparable rise in the chymotrypsin activity of the blood plasma. In both rabbits and humans, it was demonstrated that rectal administration also could be used and resulted in relatively high levels of chymotrypsin in the blood plasma. At least in the case of chymotrypsin, it thus seems clear that there are practical ways of increasing the concentration in the blood plasma. Chymotrypsin is a protein-splitting enzyme with an optimum pH of about 8. It breaks down proteins and proteoses into peptides. Further work with chymotrypsin and other enzymes alone and in combinations would seem to have the potential of providing preparations useful in the retardation of aging. This potential apparently is recognized by at least some of the enzyme manufacturers, based on conversations with their research directors. It thus seems reasonable to expect increased research work in this general direction.

Another possible approach to the retardation of aging is the use of hormones. Those available now for use by humans help to some extent to maintain sexual powers and stimulate the system. They also may add a mild glow of youth to aging skin and brighten the eyes as well as contribute to a feeling of general well being. However beneficial these results may be, they fall far short of "stopping the time clock," as many would like to see done. For this reason, the work of Dr. Carroll M. Williams at Harvard and others with the juvenile hormone in insects has stirred the imagination^{13, 14, 15, 16}, particularly since extracts producing a similar general response were obtained from human placenta, the thymus of calves and other mammalian organs.

The juvenile hormone of insects such as the *Cecropia* silkworm is secreted by the pair of cephalic glands known as the corpora allata. The action of the juvenile hormone is one of modifying the cellular response to ecdysone, the growth hormone of insects which is secreted by the prothoracic gland. When ecdysone is secreted and acts with no or very little opposition, it causes the cells to utilize fresh genetic informa-

tion and proceed from one chapter to another in the life cycle; i.e., the larval cells pupate and the pupal cells undergo adult differentiation. However, when juvenile hormone is supplied in increased amount in the form of a concentrated extract from the corpora allata of other insects, or if active corpora allata are implanted in the "aging" insects, the formation of an adult moth is inhibited. In the presence of a sufficiently large amount of the juvenile hormone, the pupa will respond to ecdysone by molting into a second pupa stage. It thus seems quite clear that the juvenile hormone somehow prevents the cytoplasm from receiving or acting on fresh instructions from the coded genetic information in the nucleus. At the same time, it apparently does not interfere with the use and reuse of the information already at the disposal of the cytoplasm. In other words, the presence of adequate amounts of juvenile hormone causes a cell to read and reread the same period in its life history, but it does not move along to the next chapter.

Whether there is a human "juvenile hormone" which can be used to "stop the time clock" remains to be demonstrated. In a recent personal conversation with Williams, he advised that they now believe that the active material in the extracts of human placenta and various glands of other mammals which showed juvenile hormonelike activity is farnesol alcohol,



They now are convinced that it is not the same as the juvenile hormone extracted from the corpora allata of insects. In December 1962, Yamamoto and Jacobson¹⁶ reported the results of a study of the activity of the four possible isomers of farnesol alcohol on insects. They found that two of the isomers, the cis 2, trans 6 and the trans 2, trans 6, were active while the other two isomers were not. They also found activity for the related terpenes, farnesal and nerolidol. No activity was found for geraniol, citronellol, squalene and mevalonic acid lactone. Their work indicated that the biological activity of farnesol and related terpenes is resident in the transconfiguration at the trans 6 or middle linkage. They have further tests in progress with homologues and analogues of farnesol alcohol. In recent personal conversations with Williams and Jacobson, both expressed the belief to the writer

that there is a good possibility of ultimately obtaining a hormone or hormonelike product which will retard aging in humans.

To a friend and fellow member who is properly impatient in his desire to retard aging, the writer suggested the possibility of collecting placenta at the Memphis hospitals and consuming them as part of the diet. The juvenile hormone of insects and farnesol alcohol are both quite stable to heat, light and air. This would suggest that moderate cooking may be possible without destroying too much of the activity, although some type of pickling might be preferred. Still another possibility, which somehow seems more palatable, would be to obtain and eat the fresh thymus glands of young calves, which Williams and coworkers found yielded very active fractions of a juvenile hormonelike material. Similar results were reported for fresh calves liver and beef tenderloin. By contrast to the mammalian organs, negative results were obtained for wheat-germ oil, soybean oil, extracts of brewers yeast, commercial lard and powdered skimmed milk, although purified extracts from heavy cream and products made from cream showed some activity.

Thoughts about the consumption of human placenta and thymus glands of calves are admittedly for venturesome souls. They may not be productive. However, they are part of the poetic license assumed when the word 'speculation' was included in the title of this paper. Consumption of the organs mentioned would involve less risk than the use of farnesol alcohol or derivatives of it until there is a reasonable knowledge of the pharmacology of these compounds. Moreover, the chance of getting the most active compound or family of juvenile hormonelike compounds very likely would be better with the consumption of the whole organs than with any extract from them. Although the feeling is shared by one of our members whose intuitive reasoning the writer respects, it should be recognized that the indicated preference for thymus of young calves compared to their liver or beef tenderloin is based largely on a hunch. However, the hunch is strengthened by the very active extracts of juvenile hormone-like substances obtained from the fresh thymus of young calves by Williams and his coworkers. The general behaviour of the human thymus throughout the life span also contri-

butes to the feeling that it, or the degeneration if it, may well be related to aging. The thymus is a reasonably large, well developed organ at birth and persists in this form until puberty. It then gradually degenerates and is replaced by fatty tissue. This behaviour alone suggests a relationship to youth, however inconclusive such evidence may be. Fortunately, there is increased interest in the thymus and the hormones it may produce. This can be expected to lead to increased knowledge from which we may all benefit.

You might properly say at this point, "Where do all of these indications and speculations leave us? What can we as individuals do *now* about the deposits that are accumulating in our bodies? We do not care whether these deposits are the result of cross-linking or any other form of insolubilization which also may be involved in deposits such as the cholesterol containing plaques in our circulatory system. We want to do something now while we are waiting for the enzymes to break up the cross-linked molecules and the hormone which will 'stop the time clock.' We would prefer something other than 'pickled' human placenta or the thymus of young calves."

There, of course, are things which we can do to improve our chances while we await the more thrilling and more traditionally American solution of a pill which we can take on the run. The information edited by Birren and Shock and the work of Bjorksten, McCay^{7,8} at Cornell, Keys⁵ at Minnesota, Stare^{6,11} at Harvard, Verzar¹² at Basel, Switzerland, and others, provide us with the following guides:

1. Have a comprehensive medical examination at least once per year, and preferably twice per year, so that prompt corrective measures can be taken to overcome or minimize any indicated problem.
2. Reduce total caloric intake to the *minimum* necessary for proper body maintenance. This may well be as low as 1500 calories per day for many people above 40 years of age. Total calorie needs decrease markedly with age. Adequate amounts of minerals and vitamins can be obtained by supplementing the diet with a number of readily available mineral and vitamin preparations. The reduction of the total caloric intake will keep down the

percentage of Krebs cycle intermediates which are at large and may cross-link with proteins or nucleic acids.

3. Maintain a high level of well balanced protein in the diet. Skimmed milk and dry (uncreamed) cottage cheese are good sources of a well balanced protein. Maintaining a high protein level will provide free amino acids to react with excess Krebs cycle intermediates and form excretable compounds. A high protein level in the diet also helps insure adequate body repair.
4. Keep total fat intake at a minimum. If substantial amounts of polyunsaturated fats are included in diets, it may be desirable to consider supplementing the diet with vitamin E (tocopherol). Increased amounts of unsaturated fats may result in an increased amount of cross-linking of the unsaturated fatty acids and some of their oxidation products with lipids, proteins and nucleic acids. Vitamin E may be an effective enough antioxidant in the human body to prevent or reduce the amount of such cross-linking. The National Vitamin Foundation, Inc., has sponsored a research project on this subject, and at least one pharmaceutical manufacturer has some research under way on it.
5. Exercise daily as vigorously as is consistent with general health. A brisk 2-mile walk or at least 30 min. of setting-up exercises should be standard practice. Excessive amounts of exercise limited to week-ends can do more harm than good.
6. Avoid toxic substances in general and particularly smoking cigarettes in excess. Evidence against a pipe and cigar is much less conclusive, but the soundest course probably is to eliminate all smoking. Alcohol in reasonable amounts is not a toxic substance, and there is some evidence that it may be beneficial.

The combination of these guides might suggest that the personal approach which the Venetian, Cornaro, found so successful has more justification than has been generally attributed to it. After an early period of ill health, which included what is described as a bad stomach and an irascible temperament, Cornaro reduced his food intake to 12 ounces

per day and supplemented this with 14 ounces of wine. The result attributed to this regimen was an active, vigorous, and productive life for a total span of 102 years; i.e., from 1464 to 1566. The accounts state that he was engaged in a public works project on a large scale at 95 and composed an addendum to his *La Vita Sobria* at that time.⁹ Included in it was the following statement:

"O truly Happy Life! At no other time in my existence, even in my sensual and disorderly youth, could I make life so beautiful. For I found that the pleasures of those years were, after all, but vain and filled with disappointments; so that I may say I never knew the world was truly beautiful until I reached old age."

May one express the hope that all of you will have this feeling in your old age if the enzyme to split the cross-links or the hormone to "stop the time clock" should not arrive early enough to materially retard it?

LITERATURE CITED

1. Birren, J. E.
1959. *Handbook of aging and the individual*. 939 pp., illus. Chicago.
2. Bjorksten, J.
1962. Aging: Present status of our chemical knowledge. *Jour. of the Amer. Geriatrics Soc.* 10(2): 125-139.
3. ———
1962. Could we live longer? *New Scientist* 15(304): 552-554.
4. Kabacoff, B. L., Prytz, B., Umhey, M., Wohlman, A., and Avakian, S.
1963. The absorption and identification of chymotrypsin. Presented at American Chemical Society meeting, Cincinnati, Ohio, January 14, 1963.
5. Keys, A., and Anderson, J. T.
1955. The relationship of the diet to the development of atherosclerosis in man. *Natl. Acad. of Sci.-Natl. Res. Council Pub.* 338: 181-197.
6. Mann, G. V., and Stare, F. J.
1955. Nutrition and atherosclerosis. *Natl. Acad. of Sci.-Natl. Res. Council Pub.* 338: 169-180.
7. McCay, C. M.
1958. The conservative attack upon problems of aging. *Geriatrics* 13: 709-717.

8. ——— and Crowell, M. F.
1934. Prolonging the life span. *Sci. Monthly* 39: 405-414.
9. Ropp, R. S. de
1960. *Man against aging*. 310 pp. New York.
10. Shock, N. W.
1960. Aging . . . Some social and biological aspects. *Amer. Assoc. for the Adv. of Sci. Pub. No.* 65.
11. Stare, F. J.
1961. Nutritional challenges for physicians. *Jour. of the Amer. Med. Assoc.* 178(9): 924-927.
12. Verzar, F.
1958. Problems of general biology of aging. *Jour of Gerontol.* 13 (Suppl. 1): 6-15.
13. Williams, C. M.
1960. The juvenile hormone. First International Congress of Endocrinology, Copenhagen, July 1960, Symposium X, Lecture 2.
14. ———
1961. Present status of the juvenile hormone. *Science* 133: 1370.
15. ——— Moorhead, L. V., and Pulis, J. F.
1959. Juvenile hormone in thymus, human placenta and other mammalian organs. *Nature* 183: 405.
16. Yamamoto, R. T., and Jacobson, M.
1962. Juvenile hormone activity of isomers of farnesol. *Nature* 196(4857): 908-909.

WINE AND VINE — AN APPRECIATION

BY A. ARTHUR HALLE JR.

Read before "THE EGYPTIANS," April 18, 1963

In this, my first address to THE EGYPTIANS, what could be a more appropriate beginning than a quotation from Egypt and from Memphis, Egypt at that. An old wine cellar inscription from Memphis reads "The mouth of a happy man is filled with wine."

Despite such enthralling subjects as love and war, there is no subject in which the literature of all ages is richer than in the praise of wine. The song of wine has been sung since the dawn of civilization, and wine itself has been an integral part of civilization, for the most civilized men throughout history have used it and been loudest in acclaiming it. Ernest Hemingway in "Death In the Afternoon" is quoted as follows: "Wine is one of the most civilized things in the world and one of the most natural things in the world. It has been brought to the greatest perfection, and it offers a greater range of enjoyment and appreciation than, possibly, any purely sensory thing which may be purchased."

"Glory, the grape, love, gold, in these are sunk
The hopes of all men, and of every nation;
"Without their sap, how branchless were the trunk
Of life's strange tree, so fruitful on occasion!"

The above lines by Lord Byron most assuredly reveal the aspirations of his time. Here is a short poem by Oliver Herford and it is entitled "A Plea."

"God made man frail as a bubble;
God made love, love made trouble.
God made the vine, was it a sin
That man made wine to drown trouble in."

Ralph Waldo Emerson wrote in a letter "I think wealth has lost much of its value if it has not wine. I abstain from wine only on account of the expense. When I heard that Mr. Sturgis had given up wine I had the same regret that I had lately in hearing that Mr. Bowditch had broken his hip."

The Biblical references to wine are very numerous, and apt and interesting quotations from the writings of the ancient

Greeks and Romans about wine could be compiled in a book that would be almost as large as the unabridged dictionary. The references to wine in Homer are equally as numerous as they are in the Bible, and the poet Anacreon called wine immortal. It was Plato who proclaimed that nothing more excellent than the juice of the grape was ever granted by God to man. It may be interesting to note that Anacreon, a notable devotee of Bacchus, died at the age of 85 by choking on a grape seed, and Plato, who lived to be 80 or more, died at a wedding feast. Virgil, in the second book of the Georgics, wrote a poetic treatise on wine growing in which he says that he who would number the vines of Italy might as well try to count the waves of the sea, or the grains of sand blown by the wind upon the desert.

The Bible is packed with praise of wine: "Use a little wine for thy stomachs sake" thundered the arch Puritan St. Paul. "The best wine for my beloved" whispered Solomon, and he was named "the Wise." "Drink thy wine with a Merry Heart" counsels the Book of Proverbs. Noah planted a vineyard after the flood and, from the casual tone of the passage, it seems evident that his was not the first vineyard to be planted. One cannot help wondering where Noah got his grape vines; that is, whether they survived the flood, or whether, before the deluge, they also went in the ark as the animals did, marching two by two. In this connection I would like to quote the first two stanzas of a poem called "Wine and Water" by G. K. Chesterson.

"Old Noah he had an ostrich farm and fowls on the
largest scale,
He ate his eggs with a ladle in an egg-cup big as a pail,
And the soup he took was elephant soup and the fish he
took was whale.
But they all were small to the cellar he took when he
set out to sail,
And Noah he often said to his wife when he sat down
to dine,
I don't care where the water goes if it doesn't get into
the wine.
The cataract of the clift of heaven fell blinding off the
brink,

As if it would wash the stars away, as suds go down the
sink,

The seven heavens came roaring down from the throats
of Hell to drink,

And Noah cocked his eye and said, It looks like rain
I think.

The water has drowned the Matterhorn as deep as a
Mendip mine,

But I don't care where the water goes if it doesn't get
into the wine!"

Despite the above quotations, there is nothing to show that Biblical personages had any idea that a fine wine kept in seclusion for many years could be transformed into a nectar fit for Jehovah.

Much divergence of opinion is prevalent concerning the definition of the term wine and what is or is not legitimately entitled to be described as such. Beverages consisting of the fermented products of parsnips and elderberries for instance are loosely described as home made wines and some brewers even fancifully describe their best brews as "Barley Wine." Fermented products, made abroad, of substances of palm juice, dates, bananas, figs, and even mushrooms, are also designated "Wines." If your grandmaw makes any of the above mentioned products, it is permissible for her to do so, but please for heaven's sake tell her to stop referring to it as wine and also pray tell Mogen David the same.

Real wine is the fermented product of the fruit of the vine, hence the name, and any beverage not prepared from fermented grapes is not wine, and is misnamed, if so called. To sum up: Wine is the fermented product of the fresh juice of the fruit of the vine (whatever the method of production) and not that of any other fruit, herb, grain or vegetable. This is the commonly accepted meaning of the term "Real Wine." There is still much ignorance concerning wine, in spite of a spate of literature on the subject which has been disseminated from time immemorial.

The truth is that wine is a very subtle commodity, and is produced in such vast quantities and diverse qualities that it is a matter of a life time study to comprehend and appreciate fully the many facets the subject presents. It is natural,

therefore, that a certain amount of divergence of opinion should exist, especially as individual tastes are bound to differ.

In order to judge correctly the value of any arguments on the subject it is necessary to know the broad principles of vinification and these, therefore, are briefly recounted, below.

Wine can be divided into three main categories. 1. Fortified wines. This group includes wines usually described as dessert wines such as Port and Marsala. They are mainly sweet to a degree because the spirit is added at an early stage thus checking the fermentation, and leaving a large proportion of unconverted grape sugar; a dry fortified wine such as Fino sherry is also produced. These wines will be high in alcoholic strength owing to the added spirit, which is usually grape spirit (brandy). 2. Made wines. This group comprises wines to which a liqueur has been added and includes sparkling wines, such as Champagne, which usually have a dosage of liqueur or sugar dissolved in old wine, to insure that a sufficiency of gas is produced during the secondary fermentation, which takes place in the bottle. 3. Natural wines (to which no addition has been added). This group embraces the still, beverage wines, which are light in alcohol, because fermentation ceases after a certain degree of spirit has been produced. These wines will be either dry, medium-dry, or sweet, according to the sugar content of the grapes employed. In the case of a grape with a low sugar content, the whole of this will be converted until the degree of alcoholic saturation which checks the fermentation is reached, thus producing a completely dry wine.

This paper deals largely with natural wines and specifically with quality natural wines from France.

The color of wines is either red, rosé or white. The first is made from black grapes, but white wine can be made from either white grapes or black grapes. In the latter case the result is achieved by excluding the skins, which contain the pigment, from the fermenting grape juice ("Must"). White wines are not truly white, but range from pale amber to dark golden. True rosé wines are produced by removal from the must of the black skins shortly after fermentation has commenced.

Just as any life cannot be created or even totally explained, so life in wine also is somewhat a mystery.

Wine is "conceived" by "Mother Vine." Between the moment when the fruit is born from the flower, and the moment the grape is picked, the normal length of pregnancy is 100 days. Some vintages are nevertheless like some children, "Early born" by a few days. During that period the mother-vine needs a lot of nursing. The way she is treated is very important for the baby to be born. Personal care must be given to each single stock; pruning; helping to fight disease; a full education of mother-vine—all this is necessary to bring life to healthy children.

It is often debated, whether, for human children, better results are achieved by very strict education or by letting them do as they wish freely, wildly. For the vine there is no question; the easy way is the worst. Wild grapes in rich soil cannot give life to good wine. The poorer the soil the tougher the fight for life, the lower the production per acre, the more chances of achieving strong children. A hard struggle for life is the best school of all, the only one which creates real "characters," "personalities." This is the main characteristic of high quality-wine. What is life without character?

Some people wonder why the same vine stocks do not produce in different countries, the same quality wines. In some countries where the vines enjoy rich and well irrigated soil, a smooth climate, and where they are cared for to give the largest possible production, the wines year after year can be fair or healthy, but they lack fragrance and taste; a good beverage possibly, but there's nothing exciting about them, nothing "mysterious," no sensitiveness—no future either.

The same vine stocks in poor, gravelly soil, severely pruned, suffering an uneven climate produce wines which, having a strong character, are different from one year to another. They have a true "life" and each develops in its own way.

When harvesting time arrives a new vintage is to be born. This birth is always a mysterious moment. The entire change in state and condition is a wonder; a simple fruit juice, and a rather dull one too, becomes something entirely new physically, chemically, biologically, and just as different as far as we can see, as is a child before and after its birth. Actually the birth

of wine remained entirely mysterious for thousands of years, until the French scientist Louis Pasteur discovered the primary causes of fermentation.

The birth of wine itself takes a few days, sometimes a few weeks, to reach its achievement. Experts, like doctors and nurses watch this slow birth day and night. The temperature must be checked several times a day, because too much heat is dangerous and one must instantly cool it down. It is dangerous because everyone knows that ferments or yeast can be put to sleep by too much heat. This process is known the world over as "pasteurization" from the name of the scientist Pasteur who discovered how to kill such ferments, as well as the conditions which enable them to live and develop.

This making of the wine is certainly the most important moment in the future life of the wine.

The wine will be gently and lovingly laid down into oak barrels. Some wine makers insist on using new barrels every year, while others say that sound old barrels are the thing to use. Most white wines stay in their casks just a few months, but the red Bordeaux and Burgundy wines have to stay two or three years in their oak casks as do the rich Sauternes.

During this time in the casks they have to be watched quite carefully. They even may be treated for illness or to prevent illness. The first year red wines are decanted into fresh barrels four times, and the second year only three times; eventually in the third year maybe only twice. This process of transferring into new barrels is called racking. If they were kept much longer in the wood they would breathe too much and thus would age too quickly. This is the reason why, after having properly matured in casks, the wine is transferred to a different kind of container, which does not allow as much oxygen to creep in, namely the glass bottle. But, mind you, then the breathing is not entirely stopped. If it were, wine would stop aging too, which would be a shame. Cork is used, not glass or hermetically sealed stoppers, because the oxygen can still work very slowly on the wine by just creeping through the pores of the cork.

Actually each wine of character ages in its own way. Some develop quickly, others take a long time to reach their "peak." Some remain there a year or two and then begin to become

overaged and fade out quickly. Others, when kept under good conditions may stay there many years and slowly improve. Some wines may be developing some latent qualities such as finesse, fragrance, smoothness—while other characteristics diminish; perhaps sturdiness, body, strength, so that according to which of these qualities appeals more to us we say a certain wine is declining or still improving. Why these short or long lives? No one knows exactly, anymore than one knows why some people are old and blasé at 25 and others still young and enthusiastic at 90. The same thing happens with wines: some grow old and finally pass away within a few years. Others remain full of life and excitement for many decades and reach death after a life of 60 or 80 years or more. The life and death of wine is a mystery.

Europe is still the great wine growing region of the world. If we want to know and understand wine, we may best begin by learning something of the wines of Europe and the part they play in European life. We could make a wine guide by putting together a group of paragraphs treating one by one the wines of Germany, Italy, Spain, Portugal, Yugoslavia, Romania, Hungary, Austria, Switzerland and France. Such a recital, however, would be a mere catalogue. The best way perhaps is to choose a single country and treat of its wines in rather a bit more of detail. The obvious choice for such treatment is France. French wines are available in very great variety in this country. More than half of all the wine produced in the world is made in France and the vast vineyards of former French North Africa are economically a part of France today. The wines of France pretty fully run the gamut of the types of wines. If you know the wines of France with any degree of thoroughness, you will be fairly well equipped with a critical apparatus permitting you to judge the quality of virtually any other wine that might come your way.

Almost every part of France grows wines. However, there are three regions in particular whose renown is universal. These are Bordeaux, Burgundy, and Champagne.

Bordeaux is along the Atlantic coast of Western France where there is an estuary, which is the Gironde, formed by the confluence of the Garonne and the Dordogne rivers. The port of Bordeaux is located at tidewater in a position analogous

to that of Baltimore on the Chesapeake. It has been the center of a great wine trade since the 4th century. If wine were produced no where else in France, the huge area centering upon Bordeaux would be sufficient to keep France among the great wine growing nations of the world.

The fame of Bordeaux is based chiefly on its red wines, or claret, a name which the English gave to the red Bordeaux wines, which are made from a half dozen related grape varieties, chiefly the Cabernet, and have about the same resemblance to each other as a set of musical variations has to a given theme. The Bordeaux wines differ from one another, and from year to year, and yet all have a distinctly family character. The most famous clarets are those from the Médoc, the strip of land that stretches along the left, or west bank of the Gironde from the outskirts of Bordeaux about half way to the sea. It is semi-oceanic in climate, with hot and humid summers and a pattern of rainfall, raw winters, and, thanks to the influence of the sea, a relative freedom from killing Spring and Autumn frost. It is distinguished by sandy soil, low elevation above sea level, hence sluggish drainage, and much swampy land, with a predominant cover of coarse grass and scrub pine. In spite of this unpromising aspect, it is here on the better drained pieces of land that the famous Crus Classés, or classed growths are produced. It is one of these classed growths that you will taste here tonight. There are hundreds of crus bourgeois also produced here, which wines are nearly as good as the classed growths, and yet there are hundreds of other "artisan" and "peasant" crus-wine showing related characteristics which are produced here. The best of these wines are château bottled, which is to say: bottled at the spot where they are grown and made into wine.

The Crus Classés mentioned above are the wines which were classed in the famous 1855 list, and are very nearly the same today as they were then. This is to say—that these wines, which were classed in 1855, were classed in growths from one to five and were classed according to the prices which they brought on the export market, which was supposed to reflect the quality. Of course, there would be some changes were the wines to be reclassified today, but it is remarkable in that the wines so classed then are almost the

same today as far as the relation between price and quality is concerned with a few notable exceptions.

Yet the Medoc produces only a fraction of the red Bordeaux wines. On the right or east bank of the Gironde and upriver from there stretch the vineyards of the Cotes de Blaye, Fronsac, St. Emilion, and Pomerol. On the left bank, upstream from Bordeaux, lies the Graves district which also produces more red wine than white, though the name Graves to many people connotes slightly sweet white wine.

Lying also upstream from Bordeaux on the left bank are the communes of Barsac and Sauternes, from which comes the other Bordeaux specialty, the sweet dessert wines we associate with the names of Sauternes. As in the Medoc there is here a classification of the best wines which range in quality from the famous Chateau Yquem down to white wines of ordinary character. The fine white wines come mostly from a blend of Sauvignon and Semillon grapes.

From the point of view of the consumer the most comforting trait of the Bordeaux wine trade is that you get what you pay for. Bargains are rare, but so are deceptions. Those who seek fine wine and are willing to pay the price are not likely to go wrong, because the words "Mise du château" on the label, and the brand on the cork, are guarantees that a given wine has been dealt with from vineyard to bottle by the producer. Likewise those who pay ninety-nine cents for a bottle which says Bordeaux and nothing else gets a bottle of wine that is worth exactly ninety-nine cents.

This part of France is fortunate also, because during the Revolution, the great Châteaux were never broken up and subdivided. This has meant that larger land holders who were capable of producing fine wine have been able to hold their vineyards together instead of being fragmented as they were in other less fortunate parts of France.

Burgundy: Another look at the map would indicate the Côte d'Or in North Central France. As the Bordeaux district is essentially maritime and lowland, so the Côte d'Or, which we call Burgundy, is continental in character, lying along the slope of a range of hills that protects the vineyards from the west winds. It is a stretch of slope about 40 miles long ranging in width from less than half a mile to perhaps a mile and a

half, beginning just south of Dijon and extending not far south of the lovely wine town of Beaune.

Unlike the Bordeaux region, there are no large chateaux owned by an individual in this area, but only small individual vineyards cultivated by loving care and hard work of the same family from one generation to another. What used to be a plot owned by one person is now divided, and each individual's holdings are marked by low stone walls.

The hills of Burgundy are divided into two parts. The northernmost region, which is known as the Côte de Nuits, produces almost exclusively red wines; such wines as Chamer-tin, Musigny, Clos de Vougeot, Richebourg, and the most famous of them all, Romanée-Conti, which yields an average of seven thousand bottles a year off of four and one-half acres. The names alone stir a wine lover's imagination. The soil of these famous vineyards would be a revelation to any farmer from this Delta region. It is almost blood red in texture and full of stones. It would appear incapable of producing anything.

About six miles further south lies the second region, called the Côte de Beaune, which produces red wine but also some excellent white wines. The most famous among the red wines of this region are Corton, Beaune, Pommard, and Volnay. The greatest names among the white wines include Montrachet, and the only slightly less good Chevalier Montrachet and Batard-Montrachet. There is also Meursault and the excellent white wine known as Corton Charlemagne. The white wines come from the Pinot Chardonnay grape.

And about 65 miles north of the Burgundy region there is a little village called Chablis. Here a very dry white wine is produced that is reputed for its delicate and fruity flavor.

About the same distance to the south of the Côte d'Or exists another wine producing region, the Beaujolais. This region produces a very popular and fruity red wine, usually drunk fairly young, and it comes from the Gamay grape. This grape does very well in the granitic and acid soil of the Beaujolais, but is a very very poor second to the Pinot Noir grape on the calcareous slopes of the Côte de Nuits and the Côte de Beaune. The red wines of the Côte de Nuits are acknowledged to be the finest wines produced in the whole of Burgundy

by reason of their magnificent balance of all desirable qualities. The best Beaujolais are those which are entitled to carry the village names such as Julienas or Fleurie or Chenas or several others of this area. In this same area is an island of limestone soil which produces a dry white wine known as Pouilly, or, to be exact, Pouilly Fuisée.

These two wines Beaujolais and Pouilly are never very expensive and have a very pleasant taste. For these reasons, they are very popular in France as well as elsewhere.

The third of the most renowned wine growing regions of France is Champagne. In the Champagne region the fine wines come from vines that must put up a struggle. Soil of relatively low fertility, the danger of winter killing, the frost menace in spring and fall, excess of humidity, and a short growing season, make wine growing hazardous. The grape varieties are two: the Pinot Noir which differs in only slight particulars from that of the Pinot Noir of Burgundy and the Pinot Chardonnay. The Pinot Noir when quickly pressed after picking, gives a dry white wine of considerable body. The Chardonnay, pressed in the same way, yields a lighter and more delicate white wine. After fermentation these wines are assembled and blended by the great Champagn houses. Differences between the great brands of champagne are accounted for by the differences in the proportions of the various wines making up the blend. Subsequently, the blend is submitted to the complicated process of bottled fermentation which in the end produces this luxurious wine.

There are three other wine growing regions that are almost as well known in France, although not outside, as the greatest. These are Alsace, the Rhone valley, and the valley of the Loire, which includes Anjou.

The white wines of Alsace are made chiefly of the Gewurz Traminer and the Riesling grape. Because this district is small and the production uncertain and small also, the Alsations have concentrated on quality of wines. The identity of the wine maker is the key to quality. These wines are the French answer to the Rhines and Moselles of the Germans.

The Rhone valley from Lyon to the Delta is a much larger district and wholly different. In this sun-baked valley the influence of the Mediterranean climate makes itself felt well

into the heart of France. There is a common quality in the red wines of the Rhone valley all the way from those of the Côte Rôtie just below Lyon down to the wines of the Chateaufort-du-Pape, grown near the city of Avignon. These are heavy bodied and formidable wines, high in alcohol, rough when young, firm and round when mature. Most of these Rhone wines are best classed as "superior" rather than fine, although Hermitages, both red and white, can hold their own with the best when carefully selected and properly aged. Rhone valley wines have obvious likenesses to some of the best California red wines. The Syrah grape is the principal one used.

The third of this trio of lesser regions, the valley of the Loire, is a sprawling area stretching all the way from Nantes (where the Loire flows into the Atlantic) upstream into the Massif Central. Although a good deal of red wine is grown for local use, this is essentially a region of light and inexpensive white wines, which are bottled young and are appreciated by the French for their freshness, fruitiness, and tartness.

The principle wine types, working upstream from the region around Nantes, are those known as Muscadet, Anjou, Saumur, Vouvray, Sancerre, Chavignol, and Pouilly-Sur-Loire. Every Frenchman knows these: we Americans must go to France to find them and learn how gracefully they fit into the French notion of the good life.

The regions we have mentioned all are regions of mixed agriculture in which wine growing plays an important and often dominant part, but in which there are other important agricultural resources. However, in Mediterranean France there is an entirely different situation. Here in a half dozen departments, the grape vine is absolutely dominant. This is the region of the vin ordinaire, the wine that goes with the daily bread of the working man and from which region wine is shipped in tank trucks or cars.

In France, six million people or 12% of the population are more or less directly connected with the wine world. More wine is drunk in France than in any other country in the world; Statistics show that 35 gallons a year are consumed

per inhabitant. The alcoholic content is about that of one martini per day per person.

France is also the country where the people do the most talking about wine. It is the topic of conversation at all social events. But interest in wine is not a social prerogative. The renown of a good wine can make the reputation of a neighborhood bistro. To own a cellar of repute is a sign of great distinction. Everywhere in France the man who knows how to talk about wine is esteemed and envied, for he is considered able to judge the mysterious workings of nature.

In the wine making regions of the world expert tasters and connoisseurs can be found, but there are more people who don't know wine. There should be many more knowledgeable lovers of wine. Allowing for the beer drinkers, the tea drinkers, the water drinkers, and those poor things who are quite content with coarse food and raw spirit—there remains a multitude of normal people who enjoy wine even when they cannot analyze its qualities. Some of these are amateurs of good food—even gourmets of impeccable taste—in which case, their lack of expertise in wine is the more regrettable.

Appreciation of a fine wine is dependent upon an infinity of subtle nuances of scent and taste, a gamut of savors at one rich and rare, finer and more elusive than even the most delicate dish. The average man would be far more likely to confuse two such different wines as a Medoc and a St. Emilion than to take a chicken for turkey or a pot roast for a filet.

The mysteries of tasting must not be exaggerated. It is an art which can be learned, like the others. One can be a critical lover of music without being a virtuoso; of painting without being able to draw; one can acquire the rudiments of mathematics without being a born mathematician. In the same way, one can learn to appreciate wine without having any special gifts. It is sufficient to have the senses of taste and smell normally well developed, some power of concentration, a good memory and application in tasting, and a complete novice will soon become a passable judge of wine. Moreover he will derive considerable pleasure from this newly discovered refinement of living. Tasting is not a guess-

ing game, any more than literary criticism consists of reading one paragraph of a work and then making a guess at the author. It is true that one can sometimes recognize both the vintage of a wine and the vineyard, and this dazzles the uninitiated—but that is just a lucky shot, and one is more apt to draw a blank.

Knowledge of wine comes with practice and tasting, especially in comparative tastings. A beginner would do well to read up on all he can of the subject—always remembering that probably nowhere is so much prejudice, nonsense, and incompetence to be found as there is among wine fanciers. There are people who complain that \$4.00 to as much as \$18.00 is an outrageous price to pay for a bottle of wine, and that no wine can possibly be worth it. Let them drink beer, cider, or even Coca-Cola if they like. It has taken several centuries of what is called "know-how," the care for a soil which can very easily be unbalanced by a mistake in manuring or cultivation, tending of thousands of plants subject to very serious diseases and that are difficult to please: the application of five or six sulphur dustings and up to twelve copper sprayings every year to every vine; winter and summer pruning by very highly skilled workers; the capitalization of much expensive machinery; the annual purchase by each good sized château of something like \$10,000.00 to \$30,000.00 worth of new oak barrels, not to mention bottles and corks which are also not cheap; the making of the wine, and then keeping it for 4 to 5 years at least, which again has to be capitalized. Moreover it has entailed the rejection of part of the crop, part of the wine, as imperfect; and sometimes, in bad years, of the whole crop. Less expensive wines can be made quite cheaply, and they are very nice too; many people drink them every day. But the making of great wines is an extremely expensive business and whoever wants to enjoy the keenest pleasure the palate can confer, has to pay for it.

It must be remembered that the very finest of wines cannot begin to meet the demand for them. Therefore the old law of supply and demand has once again come into play. The domaine of Romanée Conti in Burgundy, said to be the finest in that particular section of France, has only 4½ acres in extent and approximately 20,000 vines. The wine from it is very, very delicious and is extremely expensive. One sees

wine lists from wine retailers in this country where a case of 12 bottles of Romanée Conti of an ordinary year sell for as much as \$240.00 per case.

Wine lovers love to talk, and they use a language which is peculiarly their own. Wine tasters like almost all other professional people, including doctors, atomic scientists, and also baseball players, have their own special vocabulary. This is largely unintelligible to those unfamiliar to it, and has been subjected to a good deal of undeserved ridicule. Thus some of us might be a little embarrassed now to describe a wine as modest or tender or pretentious, but these are serviceable terms and if you use them and weren't an expert we would know very well what you meant. The opposites of modest tender, if we were talking about a man or a woman, would perhaps be loud and tough, in wine, obvious or even hard would make sense; we know what a hard wine is and in wine tasters' jargon it is a fairly precise if limited description. Admittedly wine tasting is far from an exact science, and a taster's verdict is not a mathematical equation, but if a music critic can say that a violinist has a lyric tone or a soprano a warm voice, or if an art critic is at liberty to call a painting vibrant, or sincere, or well organized, wine tasters who work mostly with the more neglected of our five senses, taste, or smell, have some right to their lingo too. In fact one rather suspects they come closer to defining their terms in layman's language than can most of those who write about music and art. An amateur of wine can soon learn the wine tasters' lingo in much the same manner as a baseball player, when young, learns the peculiarity of the baseball terms. Those who are amateurs of subjects other than wine would most assuredly recognize such terms as elegant, full-bodied, robust, rounded, spicy, but to a wine taster they might have quite a different meaning. Nevertheless to each of the amateurs the meaning is quite plain.

Now that a very few of the common words in the wine taster's vocabulary have been mentioned let us go one step further and try to establish communication with the wine itself.

This conversation will begin the moment it enters your mouth and floods your taste buds. The sensations or impressions which are translated by your palate are as clear, as

varied, and as colorful, as those transmitted by your eyes or any other sense organ.

The first impression that strikes is determined mostly by the alcohol content and constitutes the body. Wine can give an impression of fullness or solidity, sometimes to such an extent that it seems as though one could chew it.

Next comes taste. The taste of wine is based on three of the four basic taste sensations; sweet, acid and bitter (only the salty taste is excluded). Blending of these three elements provides, as with colors, a palette of subtle, rich, and infinitely varied shades. A white Bordeaux, for example, has a sweet taste first, but immediately afterward it shows us a slightly acid taste with a touch of bitterness. These three tastes form a pleasant mixture. Each enhances the other, either by counterbalancing or emphasizing it. Moreover each taste is distinguishable on its own. The sensations return in successive waves, each of which strikes a different chord. The greater the quality of the wine, the more chords will echo against your palate and enchant you. The initiation of the palate to these mysterious sensory impressions helps differentiate the man of culture from the mere human being.

Then comes an impression of texture. It can either be coarse or fine. If the wine has but one taste which presses upon you instantly then it is a common wine. If, on the contrary, it is full of different suggestions of taste which it reveals slowly, like the different threads in a complicated fabric, it is a wine of elegance and distinction.

Finally comes the aroma. The aroma is a more or less pronounced fragrance reminiscent of fruit such as grapes, black currants, or raspberries, flowers such as violets, and odors such as that of the truffle and many others. Developed to a certain degree, an aroma becomes a bouquet. The term, which immediately calls up images in every language when referring to wine, has been judiciously chosen. When tasting the wine, close your eyes and concentrate; if at that moment flowers appear before the eye of your imagination—lots of flowers of every shape, color and fragrance, near you and around you and at all distances from you, and if this image repeats itself in successive waves, then the wine you are drink-

ing has bouquet. The bouquet constitutes the freshness and the charm of the wine, and the greater the wine the more concentrated its bouquet. When wine ages, bouquet fades and disappears, for the acids in the wine oxidize from contact with the small amount of air in the bottle and are transformed into ethers which give the wine a different color and taste.

The quality of a wine is judged not by the quality of the elements of which it is composed but by the relationship between them. For example if the alcohol and the acids are in the proper proportion the wine is "flowing" and "pleasant"; if not the wine can be common or "coarse." If an ideal balance exists between the sugar content and the alcohol acid content, wine is "well-rounded"; one can say it has "character." If all of these elements are well blended, the wine is "fine," "elegant," and "delicate." With the correct amount of tannin, the wine is "generous," "full," or "strong." Finally if nature has endowed it with a sufficient amount of glycerin, there is perfect harmony. The wine will be referred to as "harmonious" and "complete" and, if it is a great wine one can say that it has "body," "bouquet," "subtleness," "fullness," and "resonance," that it is a wine of distinction, a worthy descendant of its ancestors.

There are the influences of soil, type of plant, knowledge of its care, but the vine also requires sunshine, and it is the sun that ripens the grape. During fermentation, the sugar turns into alcohol which gives the wine its constitution, a bit like the flesh and bones of a human being. It must not be concluded, however, that the more sun the better the wine. We have seen that the wines of Mediterranean France have a great deal of sunshine but are very low in quality. Aside from alcohol, wine contains other elements which combine to give its individual character. In the colder temperature regions where the amount of sunshine is variable from one summer to the next, each year produces a wine of which the quality may vary from poor to excellent. These variations in quality give rise to the notion of vintage years, and charts on these years are widely distributed. The publicity given the great vintage years—1959 for example, creates a heavy demand and causes the prices to rise out of all proportion to the quality. The inevitable result is that the intermediate years

sells less well and sometimes even below their real value. Thus, a Bordeaux wine such as a Château Margaux can be quoted in New York at \$10.00 a bottle for 1959 wine, but the 1956 or 1958 sell for only \$4.00 or \$5.00. However, many of the 1956 and 1958 Bordeaux were wines of very good quality. Wine is a living thing and like all living things it develops according to certain general rules. But each individual, each group or generation of individuals—and each growth, each group or generation of growths—has its own personality which is often distinct from the production as a whole. Therefore in what might be termed an average or even a bad year, wine of a certain vineyard could be superlative or outstanding, surpassing its performance in what might be termed a fine vintage year for wines of the whole region.

Being a wine amateur is less strenuous than golf or gardening, and certainly better tasting than either the backs of old postage stamps or new trading stamps. You may have many different kinds of pleasure ranging from collecting old labels, building a wine cellar, tour vineyards all over the world, cultivate your own grapes; make your own wine, test your palate by tasting or simply bend your elbow.

Many people are able to give you as a token of their esteem a gift of a rare bottle of wine, and of course you can do the same for others if you become a collector. A wine collection certainly enables one to hold truly great dinners, which are made more so by their vinuous accompaniment. No dinner can deserve the term great unless it is accompanied by fine wine. One can almost always find some group which wishes to participate in the enjoyment of wine. For example, here in Memphis your speaker together with a few other Egyptians is a member of the Memphis Wine and Food Society which held this February a wine tasting in which wines from eight different European countries were served.

Taking a wine tour, too, has unlimited possibilities. A hospitable welcome will await a wine amateur in most of the world's wineries from California to Australia to Africa to Western Europe. In many cellars visitors are invited to taste the wines; and one can speak from personal experience that wines always seem most delicious when sampled where they

are grown. Moreover, almost anywhere you go, you find that a vineyard district is also a gastronomic paradise—a delightful blend.

Photography and painting blend especially with the vineyard traveler. Vineyard scenes, ancient cellars, and the most beautiful of all the fruits, the grape, have charmed artists from the beginning of time and if you are fortunate enough some day to glimpse a vineyard in its full autumn dress of colors you will never forget that brilliant sight.

Should this discussion have stimulated you to an interest in wine and you care to make your own, you may know that this is legal and tax free as long as you make no more than 200 gallons a year, and first sign a form at the nearest office of the Federal Alcohol and Tobacco Tax Division. There are two members of the local Wine and Food Society who are wine makers in their own right. One must confess that their efforts which I have tasted do not yet attain the perfection of a fine Bordeaux or Burgundy wine, but they have been surprisingly good if left to age and mature as they should. Our first president, George Washington found wine an absorbing hobby, as he planted his own vineyard at Mount Vernon, and even though none of his wine making efforts have survived to this day we can rest assured that his friends certainly appreciated his efforts as a viniculturist and a viticulturist. It is very pleasant, albeit somewhat expensive, to be an amateur of wine. However, one would not buy more than a dozen bottles of wine at one time of a single kind and perhaps even one odd bottle by way of an experiment. In wine, as in books and other things, one tries to be a minor Odysseus steering ever from the known to the unknown.

Having proved, we hope, that wine is both healthful and good, we may close with these lines from the late Hilaire Belloc, English poet and novelist, who in a speech before the Saintsbury Club in London at a dinner over which he was presiding said the following, "And when I depart from this earth to appear before my beloved Lord to account for my sins, which have been scarlet, I shall say to him: 'I cannot remember the name of the village; I do not even recollect the name of the girl, but the wine, my God! was Chamberlain!'"

THERMO-NUCLEAR WAR

T. H. DARNELL

Read Before "THE EGYPTIANS," May 16, 1963

PREFACE

The threat of thermo-nuclear war is one of the two great problems facing the world today.

The entire problem cannot be presented in a limited time. Much of the most pertinent information is unavailable, being classified as Top Secret. There are no simple, pat answers. Created by scientific advances beyond the comprehension of laymen, the difficulties are complicated by the psychologies of individuals in high places as well as conflicts among national ideologies.

No claim of originality is made for the material presented herein, ideas having been freely borrowed from many sources. No unique path to a proper solution is offered.

Yet apologies for the presentation are unnecessary. The problem is crucial—people must be awakened to think past the superficial aspects, and to fight for the right answers.

TECHNICAL BACKGROUND

Nuclear war came into being just prior to the end of World War II. Of the first nuclear explosion, it is worth repeating that the scientists present showed no elation at the successful birth of their brainchild. Rather were they appalled at the sheer magnitude of the force they had unleashed upon an unprepared world. Speaking of the top scientists as they returned to Washington, General Groves said, "They were still upset by what they had seen, and could talk of little else."

This first atomic explosion was without precedent. Thruout his existence, man has been fruitful in the invention of devices whereby to increase his ability to destroy. But until the harnessing of the atom no single invention had ever multiplied previously existing power by a factor as large

as ten. On this unique occasion the factor of increase was in the thousands. Small wonder the scientists, who understood arithmetic, were upset.

Theoretically, each pound of fissionable material can release energy equivalent to 8 thousand tons of TNT. The Hiroshima bomb contained about ten pounds of this material, but its efficiency was low, so the yield was equivalent to only 20 thousand tons of TNT. Only?—the single bomb killed almost 70,000 people outright, seriously wounded another 70,000, and destroyed 2 square miles of the city.

The first hydrogen or thermo-nuclear device was exploded on an atoll in the Pacific on 1 Nov. 1952. Again the results were revolutionary, the explosive force being a thousand times as great as the A-bomb.

Current United States H-bombs are reported to have yields up to 24 million tons. In 1961, with the biggest blast in history, the Russians proved they have a bomb with a yield well over the 100 million tons boasted of by Khrushchev.

So much for the warheads. In less than two decades, the destructive power that could be packed into a single weapon was multiplied more than five million times.

During the same period an equally important revolution occurred in the field of delivery vehicles. The Hiroshima bomb was a bulky affair weighing nearly 5 tons. As such it could be carried only by a heavy bomber which was both slow and highly vulnerable to enemy attack.

Missiles, the so called ICBM's, offered much higher speed and lower vulnerability—but it was not until the advent of the H-bomb that their development was seriously undertaken.

The Air Force produced the Atlas and Titan. Both are large, long range rockets, capable of delivering a one megaton warhead thousands of miles with surprising accuracy. The first became operational in 1959, the second in 1961.

On its own, the Navy developed a missile which could be launched from a submarine. As currently produced, the Polaris missile will deliver a 600 thousand ton warhead up to 2500 miles. It has distinct advantages over the Titan and Atlas, since its use of solid fuel allows it to be fired almost

instantly—whereas the other two, with liquid fuel, require elaborate preparation and count down.

The Air Force also produced a solid fuel, quick firing missile, the Minuteman. This has a range of 6500 miles, carries the same warhead as Polaris, and is stored in a hardened underground silo which also serves as its launching pad.

Not much has been published about Soviet ICBMs, but until 1961 it appears the only ones built were the very large rockets similar to those which orbited the Sputniks. Some of the Russian submarines are believed to carry missiles, but of short range and requiring the submarine to surface.

The revolutionary character of missiles is obvious. They have reduced the time of nuclear delivery between the Soviet Union and the United States from 12 hours to 30 minutes. More important, they provide an invulnerable method of attack, against which there is no defense, now or in the foreseeable future.

Only passing mention can be made of a fourth revolution which came about during this same momentous period. Not easily identified by pointing to any specific mechanism or device, the fantastic improvements in information gathering, data processing, communications and the like brought about by electronics, constitute in themselves another completely new set of circumstances, which again basically changes the art of war.

PUBLIC MISCONCEPTIONS

With science providing a new revolution of technique every five years, it was only natural there be much muddled thinking. The great reluctance of the general public to think about such a ghastly situation has been widely expressed in two escapist misconceptions. First, no sane person would start a nuclear war since the weapons are so powerful their use would mean total destruction—second, no one can do anything, so why bother to think about it?

The assumption that use of nuclear weapons would mean total destruction is an over simplification easily disproved by elementary arithmetic. If the entire U.S. nuclear stockpile were effectively dropped on the USSR it would destroy an area somewhat less than one fourth of the Russians' 8 mil-

lion plus square miles. The reverse is also true as to less than one fourth of the U.S. being destroyed—for the Russian stockpile is as much smaller than ours, as our territory than theirs.

Furthermore, an attack of the severity just assumed is impossible, neither nation having anywhere near the necessary delivery vehicles. More in line would be one of the size used as a basis for last year's Civil Defense exercise, "Operation Spade Fork." This assumed the U.S. was hit by 355 warheads having an equivalent yield of 1800 megatons. Casualties were estimated at 20 million dead from direct explosion effects, plus 13 million additional from radioactive fallout provided no shelters were available. This is a far cry from total destruction of 180 million people.

Thus mutual suicide is not the inevitable concomitant of thermo-nuclear war. From which it follows there could be many situations in which a sane, rational leader would initiate such a war. It would only be necessary that expected losses be bearable, and of less consequence than the advantages gained from a surprise attack. On endurable losses, Russia can remember she gave up 25 million people and 40 percent of her productive capacity in World War II, and still emerged a national power second only to the United States.

As for advantages gained thru a first attack, the one point on which all experts seem to agree is that these are so great as to be unpredictable in any complete manner. Equally important to the destruction inflicted on the enemy's striking force would be the damage done to his command and control systems. These are elaborate communications networks set up to provide information as to where and what extent injury has been sustained, and to direct the retaliatory action of whatever fire-power survived the initial blow. Such facilities are also necessary to provide for succession of command, so that if one set of administrative or military leaders were wiped out, it would be immediately and widely known to whom and where authority had been transferred. To the extent his surprise attack limited the circulation of these types of information, an aggressor nation would be able to stop or hold down retaliation by threats to survivors ignorant of their surviving strength or unable to use it effectively.

The 'nothing can be done, why bother' attitude of the

public towards thermo-nuclear war is so senseless and so needs to be reversed it warrants a full and separate discussion. Suffice it to say here that in the United States basic national policy can still be set by public opinion—and concerning a situation of such vital importance it behooves the individual to become informed, and to accept his full responsibility for shaping policy.

FALLACIES IN EARLY U.S. POLICY

In retrospect the United States policy makers seem to have been no better than the general public in refusing to face facts and adhering to erroneous assumptions.

The opening gambit of the Pentagon was to place complete reliance on our monopoly of A-Bombs to maintain our national security and protect our interests thruout the world. Our conventional military forces were almost completely disbanded on the theory a mere rattling of the A-bombs in our closet would control aggression anywhere.

Which was correct for national security—no nation dared to make a direct attack on our territory. But cautious experiment by the Kremlin soon began to demonstrate the same was not true for indirect attacks elsewhere. Without conventional arms to put down minor disturbances, and reluctant to wield its big stick in third party situations, the United States was forced to tolerate indirect aggressions of considerable magnitude. In impotent frustration, we continued to add bombs to our stockpile, and stepped up production of strategic bombers.

When it was discovered in 1949 that the U.S. monopoly of A-bombs was gone forever, the reaction from shock was a determination to stay ahead of the Russians in nuclear weapons at all costs. Decision was made to expend tremendous money and effort to develop a super bomb—but conventional forces were still ignored.

Experiences of the hastily mobilized and ill equipped force which fought the Korean War (?) tempered judgment somewhat, but about that time the scientists succeeded in setting off the first hydrogen explosion. The Pentagon's faith in nuclear weapons was restored, the regular Army and Navy

continued to be treated as step children, and lush appropriations were only for the Air Force and its SAC.

Heartened by the knowledge the United States would have an operational H-bomb at any moment, Secretary of State Dulles announced the policy of massive retaliation in January 1954. Speaking before the Council of Foreign Affairs, he said in part—

“... before military planning could be changed, the President and his advisors, as represented by the National Security Council, had to make some basic policy decisions. This has been done. The basic decision was to depend primarily upon a great power to retaliate, instantly, by means and places of our own choosing.”

He went on to explain that massive retaliation would mean placing more reliance on striking power, and less dependence on local defense. Once again, emphasis was on nuclear power, with conventional forces relegated to an unimportant position.

Reactions to the announcement were not as expected. Questions were raised as to the specific meaning of the retaliation formula. Did it mean, for example, that the United States would launch a massive nuclear attack on China or Russia in the event of another Korea?

In an attempt to clarify, the unhappy Secretary spoke further two months later:

“Massive retaliation does not mean turning every local war into a world war. It does not mean that if there is a Communist attack somewhere in Asia, atom or hydrogen bombs will necessarily be dropped on . . . China or Russia . . . One thing I want to make clear beyond possibility of doubt is that I don't believe you should tell the enemy in advance just where, how and when you plan to retaliate. The whole essence of the program is that the action should be one of our choosing and he is not to know in advance what it is—and that uncertainty on his part is a key to the success of the policy.”

The clarification was no more successful than the original statement. The massive retaliation policy was clearly based on the idea of deterring Russia from aggressive action by threat of nuclear attack. Yet to be effective any system of deterrence based upon a threat of punishment must rest

upon a clear understanding of exactly which acts will be punished as well as the amount of penalty for each. Thus the coy talk of not letting the enemy know what provocations would evoke what retaliations or where or when seems not to make much sense. And the statement that if there were Communist attacks in Asia, nuclear bombs would not necessarily be forthcoming, might have been interpreted by the Soviets as an invitation to experiment further. Certainly they did, and are, and without having their hands slapped, either.

The only outstanding change in U.S. policy between 1954 and 1958 was a shift in emphasis from nuclear warheads and bombers to missiles. Although the U.S. missile program was well underway, American experts were impressed by the Russian feat of orbiting heavy satellites in 1957. Perhaps because of this and the boast of Khrushchev that Soviet ICBMs were already operational, the belief spread that the Soviet Union was way ahead in missiles—that the so-called missile gap existed.

To the extent the U.S. policy makers were influenced by fear of the missile gap, they were guided by a fallacy. But one fact they faced was certain—for the first time Russia had a strategic force, similar in character at least to ours.

Against this background the United States in 1958 agreed to the nuclear test ban, apparently willing to let up on warheads for the moment so as to concentrate on closing the missile gap. The less dramatic conventional forces continued to be neglected.

EARLY SOVIET POLICY

In contrast to the United States, the Soviet Union seems to have been more realistic in its approach. Faced in the beginning with the unanswerable threat of the A-bomb, the Russians banged down the Iron Curtain across Europe and much of Asia, and set out to acquire an A-bomb of their own.

Meanwhile, since their greatest danger was in a nuclear attack from manned U.S. bombers, they built up extensive air defenses in great depth, including a fleet of 10,000 fighter planes. Unable to duplicate the U.S. nuclear threat, they created a counter threat by expanding their conventional military machine to the point it could over run Western

Europe in short order. Finally, they clothed their country in great secrecy, not only to conceal their activities, but to deny the U.S. SAC vital information as to target locations.

As time went on, the Russians found their military machine could serve other purposes than a threat held over the head of Western Europe. Thru the tragic failure of the United States to maintain conventional forces of any significance, golden opportunities existed to stir up trouble and extend Communist interests. Such opportunities were exploited, cautiously at first, but with ever growing boldness as the reluctance of the United States to wield its big stick became more apparent.

There appears to have been no change in this basic attitude of the Soviet Union until the H-bomb became an actuality in 1954. Then and then only, did the Russians go into production of long range bombers and begin to build a strategic force. They also began to devote serious attention to ICBMs, which alone could make the H-bomb really effective.

By 1957, Khrushchev was boasting of a large strategic force of H-bombs, long range bombers and ICBMs. Evidence since collected indicates, however, that the Russians built only a minimum strategic force, continuing to rely on other factors. Apparently satisfied with their progress, and fearing an accelerated race to develop more H-bombs would increase the probability of accidental war, the Soviets agreed to the nuclear test ban in 1958.

BALANCE OF TERROR THEORIES

At the time of the test ban agreement, both protagonists accepted the fact that each possessed a sizable strategic nuclear force, capable of inflicting considerable damage on the other. The capabilities of the two forces might be quite different, but the fact both nations had a respectable force, brought about a sort of rough and uneasy balance of terror.

Two contradictory theories, leading to completely different strategies grew out of this concept of rough balance. The first assumed the balance was stable against rational acts by either opponent so long as each had sufficient force to inflict an unacceptable damage on the other. This leads to the so

called "Minimum Deterrence" strategy. To maintain the balance it requires only a relatively small force, adequate for the destruction of, and aimed solely at, enemy cities—where maximum damage can be obtained with minimum effort.

Not being concerned with the destruction of the enemy's nuclear delivery systems, it has no problem of finding out exact target locations. Its one and vital problem is to keep its own small delivery system safe from surprise attack. In those days the only solution was secrecy—i.e. a nation adopting minimum deterrence had to keep the exact deployment of its strategic force secret from the enemy at all costs.

The second doctrine concerning the balance of terror assumed with a sufficient difference in striking power the balance was not stable against rational acts of a sane government. Either the secrecy necessary to implement minimum deterrence could not be maintained, or a nation favored with a sufficient superiority might rationally gamble on the effectiveness of surprise attack. For the victim of such an attack, if severely handicapped in delivering a retaliatory blow, might be blackmailed into submission when faced with an unused reserve force considerably greater than its own surviving power.

Depending upon whether the nation adhering to this theory wishes to maintain or upset the balance of power there are different strategies calling for different activities—but in both cases, the main problem of a nation following the theory of unstable balance is to maintain at all times a marked superiority in striking force.

It is obvious the United States has closely adhered to the idea of unstable balance, and consistently striven to be always superior in strategic force. Not so obvious until recently, the Russians have held to the idea of minimum deterrence with equal consistency, and have never attempted to put themselves in the position where they could rationally launch a surprise nuclear attack against the United States.

1958 TO 1961—THE U-2 S

In the hub-bub that arose after the declaration of its massive retaliation program, the Pentagon may have realized its commitment to attack targets of its own choosing was

meaningless as long as the only targets it knew anything about were the Russian cities. In any case intelligence efforts were increased and the Air Force authorized funds for the development of a high altitude reconnaissance airplane. During 1956 a few of these planes, the U-2s, were turned over to a joint Air Force AEC enterprise, and immediately put to use.

The flight of these planes over Soviet territory were highly successful, as Deputy Secretary Thomas S. Gates reported to the Senate many years later—

“... from these flights we got information on aircraft, missiles, missile testing and training, special weapons storage, submarine production, atomic production, and aircraft deployment and things like that.”

The Russians could not have failed to be alarmed on learning of the U-2 flights over their country. Their minimum deterrence strategy made it absolutely essential that the exact number and location of their few nuclear air bases and missile sites be kept secret—yet it was obviously possible for the U-2 to obtain exactly this type of information.

When in May 1960, the Russians shot down and recovered one of the U-2s with all its photographic and other information gathering equipment, their worst suspicions were confirmed—but they should have been even more upset by President Eisenhower's saying in an attempt to justify the flights, that they were essential to the United States' national security. For only metropolitan centers qualify as targets for retaliatory strikes—there is nothing left to damage in empty air bases and missile sites after the birds have flown—hence it could only be essential for the United States to know about the bases and sites if the United States intended to shoot the Russian birds on the ground—i.e. to stage a surprise attack.

Reaction in the Soviet Union to the U-2 incident was prompt and vigorous. Khrushchev announced that from then on a full nuclear going over would be administered to any country providing a base for a U-2 flight. Cut backs in the army previously announced were rescinded. Development of nuclear weapons and missiles was accelerated with the in-

tention of breaking the ban on testing as soon as progress warranted.

The credibility of the Soviet's minimum deterrence strategy had been badly shaken, and the Russians felt a crucial need to re-establish their position in the eyes of the world. As a minor show of strength they built the Berlin Wall in August 1960. In November, Khrushchev stated flatly that if the Western Powers continued to temporize on disarmament (meetings on the subject had been going on intermittently since the test ban agreement in 1958) the Soviet Union would undertake massive re-armament.

At the beginning of 1961 both nations sharply increased their military budgets. The British-American draft of a formal treaty to ban nuclear weapons testing was rejected by the Russians. This was to be expected, for they were already jittery over the penetration made in the secrecy essential to their limited strategic force, and the treaty as proposed provided an elaborate inspection system which would have further dissipated such secrecy. As one writer observed, the Soviet fear of inspection may have been the more acute because there was so little to inspect.

In the fall of 1961, the Russians resumed testing of nuclear weapons, making good on their boast of proving a 100 megaton warhead. Almost simultaneously they put seven of their ICBMs on target in the Pacific at a range of 7,000 miles. These well publicized achievements were calculated to re-establish the credibility of their minimum deterrence force, and to demonstrate to the United States that if the Soviet Union's ICBMs were few in number, they did carry giant warheads and were accurate at great distances.

The jealousy with which the Pentagon regarded the superiority and size of its nuclear power was shown by its reply to this demonstration of Russian strength. On October 21st the Deputy Secretary of Defense let go the following counter blast:

“The total number of our nuclear delivery vehicles, tactical as well as strategic, is in the tens of thousands, and of course, we have more than one warhead for each vehicle.”

Thus 1961, the year of the great rearmament, ended with

each nation boasting of the great destructive power it possessed. Ironically, neither nation was at all satisfied with that of which it so proudly spoke, for each started off the year 1962 with military budgets again increased to an all time high, and with the avowed intent of further increasing its ability to inflict mass slaughter and destruction.

In the stepped up armament program beginning in 1961, the United States at long last recognized the need for conventional forces in a nuclear age. The number of combat ready divisions of the army was drastically increased, substantial appropriations were made for conventional weapons and equipment, greatly improved sea and air lift were provided, and the reluctant Europeans were pressured to add to their forces in the NATO command.

UNITED STATES MANIA FOR NUCLEAR WEAPONS

Unhappily, this long overdue recognition of the need for conventional forces did not signify the United States had overcome its mania for nuclear weapons. In May 1962, the Deputy Secretary of Defense announced:

"We now have in our planning . . . a pretty definite force structure . . . By the end of 1965 we will have more than double the number of alert weapons we have today . . . We will have twice the striking power by 1965 that we have now."

One can only wonder why. Conservative estimates at the end of 1962 place the United States striking power at somewhere between four and ten times that of the Russians. An individual just returned from an SAC classified briefing for cleared civilians states that information there presented puts the United States superiority at ten to one.

Two factors determine striking power—the size of the nuclear stockpile, and the number and character of delivery vehicles.

In the absence of official figures reasonable and widely accepted estimates place the existing United States nuclear stockpile as equivalent to 30,000 megatons, i.e. 30,000 million tons of TNT. By contrast, it appears the existing Russian stockpile is not one fifteenth as great.

The 30,000 million tons of explosive power in the United States stockpile is equal to an explosive force of 10 tons of

TNT for every man, woman and child on the face of the earth. That there could be any necessity for the continued production of this hyper-explosive material is beyond belief—yet the United States is doing so at a rate estimated to triple its supply in five years.

As regards delivery vehicles, the United States superiority appears to be somewhat less, but is still tremendous—being at least four or five to one in any analysis. And the doubling in the number of United States delivery vehicles that is to take place by 1965 according to Deputy Secretary Gilpatrick gives a wrong picture for it includes long range bombers which are being phased out as obsolete. Missiles are the important vehicles, and according to Gilpatrick in 1965 we will have some 1500 of them operational, including Atlas, Titan, Minuteman and Polaris, representing more than a threefold increase.

SECOND STRIKE CAPABILITY— LIMITED NUCLEAR WAR

In attempting to find the reason behind this continued striving by the United States for more and bigger nuclear weapons, one looks first at the statements of those in charge.

On 28 March 1961, shortly after taking office, President Kennedy said of basic United States Policy:

"Our arms will never be used to strike the first blow in any attack . . . we are not creating forces for a first strike against any other nation . . . we will not strike first in any conflict."

This very broad statement that the United States would never under any circumstances strike the first blow, implied the terrific United States strength was not for any aggressive action, but was to be used only in the event of, and after a Soviet nuclear attack on the United States. In effect, the unholy size of the United States strategic force was for the sole purpose of guaranteeing a second strike capability.

On 21 October 1961 Deputy Secretary Gilpatrick spelled out this idea in greater detail:

"The destructive power which the United States could bring to bear, even after a Soviet surprise attack upon our forces, would be as great as—perhaps greater than

—the total undamaged force which the enemy can threaten to launch against the United States in a first strike. In short, we have a Second Strike Capability which is at least as extensive as what the Soviets can deliver first.”

Prior to 1961, the United States command and control system had only one button for the President to push, and once that action had been taken everything available was to be thrown at prearranged targets. In commenting on changes in the system whereby control was to be exercised over which forces were fired at which targets, Secretary McNamara said on 17 February 1962:

“With this command and control system, our surviving forces can be used in several ways. We may have to retaliate with a single, massive attack. Or, we may be able to use our retaliatory forces to limit damage done to us by knocking out the enemy’s bases before his second salvos. We may seek to terminate a war on favorable terms by using our forces as a bargaining weapon. In any case, our large reserve of protected fire power would give an enemy an incentive to avoid our cities.”

Once more the Second Strike Capability theme, but now embellished with the idea that selective control of our retaliatory force might induce the enemy not to shoot at our cities. The concept that a nuclear exchange might be limited to purely military targets was reiterated by the Secretary on 16 June, 1962 in speaking of the purposes of his program:

“... to make it possible for us to retain, even in the face of a massive surprise attack, sufficient reserve striking force to destroy an enemy society if driven to it. In other words, give a possible opponent the strongest possible incentive to refrain from striking our cities.”

Such reasoning on the part of the Pentagon that a nuclear exchange could be limited to strictly military targets, would seem to imply the following sequence of hypothetical actions by the two nations:

1. The Soviet Union becomes convinced the United States will come back up off the floor following a surprise nuclear knockdown with sufficient poise to calmly and logically select the Russian targets at which it will direct its retaliatory blows.

2. In launching its surprise nuclear attack, the Soviet Union is therefore careful to hit only United States air bases and missile sites—no cities or production centers.
3. As expected, the United States uses equal restraint in its retaliations and wipes out only Russian military installations—again no cities or production centers.
4. Either the long range shooting then stops and a settlement is negotiated, or steps 2 and 3 are repeated until one side has no more ammunition left and capitulates.

The overall pattern of this analysis is not as ludicrous as first appears—for equally silly arrangements between antagonists have been adhered to in the past. The fallacy of the analysis is in its primary assumption that the Soviet Union would launch a surprise nuclear attack on the United States. For it to do so with sanity, it needs First Strike Capability—which it has never had, does not now have, nor is likely to have in the near future.

FIRST STRIKE CAPABILITY—COUNTERFORCE

First Strike Capability is an offensive posture, meaning the ability to make a surprise attack effective. It requires enough striking power coupled with knowledge of where the enemy’s force is located, so that a surprise attack will leave the enemy incapable of inflicting retaliatory damage above an acceptable level.

Second Strike Capability is supposedly a defensive posture, to deter the enemy from attacking by the threat of having more force surviving his attack than he had to begin with. But since it requires as much or more power, it carries just as great an offensive threat as does First Strike Capability.

An offensive posture beyond First or Second Strike Capability is Counterforce, which threatens a surprise attack without fear of serious retaliation. As defined by one writer, Counterforce is:

“... the maintenance of superiority in nuclear weapons and their delivery systems sufficient to destroy the enemy’s nuclear striking power, with enough force left over to hold the enemy’s cities hostages against a threat

of retaliation by any of his delivery systems that may have escaped destruction."

This definition is a very clear description of the position occupied by the United States today. About a year ago, the Defense Secretary stated:

"We calculate that the strategic retaliatory forces programmed thru 1967 could achieve complete destruction of the enemy target systems even after absorbing an initial nuclear attack."

and in his speech the following June concerning the "selective target" policy, he announced the United States had reaimed its strategic weapons so as to bear on Russian air bases and missile sites.

United States policy may be as officially stated—never to launch a surprise nuclear attack. But critical observers throughout the world are forced to ask, "Why, then, does the United States continue to augment a strategic nuclear force which is already vastly larger than necessary for defensive retaliation?"

RUSSIAN MISSILES IN CUBA

Many analyses of the Russian attempt to set up intermediate and short range missiles with nuclear warheads in Cuba have been circulated by the Press. All are suppositional, since the Soviets seldom publish explanations of their motives and acts. One analysis, not widely circulated, seems logical in view of the actual events, and whether it represents Soviet thinking, is interesting as an indication of the possibilities presented by the nuclear war game. The speculations of this analysis are roughly as follows:

The highly vulnerable Communist outpost in Cuba appeared unprotectable. Although President Kennedy had reneged on supplying air cover for the abortive Bay of Pigs invasion, growing public sentiment thruout the United States was putting political pressure on the administration to clean up the Cuban mess, and semi-official encouragement was being given to Cuban refugees engaging in guerrilla raids as practice for another invasion.

It would be futile for Russia to rely on conventional forces to back up its guarantee to protect Castro—for any second

invasion would be backed, openly or not, by United States forces, and a drawn out Korean type affair would mean impossible logistics. And Khrushchev's vague threat of throwing nuclear bombs to ward off interference in Cuba was completely incredible in view of the vastly superior United States nuclear power.

So with everything to gain, and practically nothing to lose, the Kremlin gambled on putting missiles in Cuba with the full expectation of removing them before even one had actually been used.

The risk of the United States pushing nuclear buttons in reflex reaction to suddenly finding out what was going on was reduced as much as possible by loudly announcing "defensive" weapons were to be shipped to Cuba. Khrushchev outlined the program in July and August with blustering threats of retaliation for any interference, thus effectively directing United States attention to the ships carrying the missiles. The missiles themselves were not camouflaged and only barely covered, so their sizes and capabilities could be readily ascertained. And the launching pads were constructed out in the open, easily seen and photographed by United States air reconnaissance.

The further the Russians progressed with the missile installation before the United States woke up and screamed, the better would be their position. There was always the danger the United States might throw as well as yell, but the Russians were prepared to back down immediately at any stage of the proceedings—and if the Americans acted rationally they would accept a temporizing offer and negotiate.

Negotiation was the Russian prize—in exchange for removing their missiles they might gain as much as a United States guarantee of non-interference in Cuba, or a reciprocal removal of United States missiles from Turkey.

This entirely hypothetical analysis jibes fairly well with the superficial actions that occurred, and unhappily far too well with the outcome of the resulting negotiations. Persistent rumors of the U. S. missiles in Turkey being dismantled have not been officially denied; at one stage the United States did guarantee to keep hands off Cuba; and

the State Department's attitude towards the patriotic activities of Cuban refugees has become anything but friendly or sympathetic. Regardless of what it cost to ship the missiles out to Cuba and back, it was a bargain price for the Russians to pay for making an indefensible outpost impragnable.

HORROR OF PRESIDENTIAL RESPONSIBILITY

Before adverse criticism is levied at the President for his failure to take full advantage of the Soviet backdown in the Cuban crisis, a thought should be given to the horrible responsibility attached to his office. Presumably, John Kennedy knew what he was taking over, yet it must have come as a ghastly shock to be briefed on the complete picture and come face to face with the dread knowledge his was the one finger in the West which could, or on occasion, must, push the button unleashing the holocaust.

In every crisis, the President must weigh the value to be gained by direct action with the X-million American lives that stand to be lost as a result of such action. Thus it may be assumed that before he challenged the Soviet missiles with an ultimatum, the President decided the damage from allowing them to remain in Cuba was of more consequence than the American casualties which might result if the Russians refused to back off and forced him to take aggressive action.

When the Russians quickly agreed to remove their missiles, the President may have been tempted to press his advantage by demanding a complete evacuation of all Communists from Cuba, as was suggested by several military critics. If the President were so tempted, he had to first consider the possibility of the Soviets being so provoked that they would counter somewhere else in the world by a drastic move still short of nuclear war. For example, Khrushchev might announce he was taking over Berlin with conventional forces within 24 hours.

The United States is bound by treaty to resist any take-over of Berlin, but could not do so successfully without using nuclear weapons. It is agreed that any use of nuclear weapons against conventional forces in a major theatre would inevitably and rapidly escalate into an all out nuclear war. Granted it would not be rational for the Russians, knowing

they would be obliterated, to precipitate a situation leading to all out war—but if they did happen to do so irrationally, would the President follow thru knowing on his part that 50 or 20 or 10 or even 1 American city would immediately go down the drain?

The problem of deciding just how many American Cities or people are worth jeopardizing to preserve Western Europe or Berlin is quite realistic, and has been faced and discussed widely in Europe if not in the United States. Europeans generally believe the United States would be unwilling to sacrifice so much as one-fourth of its population to prevent Soviet conquest of all Western Europe, let alone just Berlin. This is likely one of the main reasons de Gaulle is so intent on getting nuclear weapons for France. Not that his A or H bombs would be significant in amount—but they would give him the power of initiative, so that if a showdown came and the United States shied away from mass reciprocal destruction, he could get the game underway by throwing his ball into the park.

PRESENT CONDITIONS

Coming now to the present, it is widely recognized things are not only bad, but are rapidly getting worse.

The United States and the Soviet Union are locked in a vicious arms race, which doubles or triples the number of alert nuclear weapons every two or three years. As the number of these instruments of destruction spirals higher and higher, the probability that one or more of them will be set off by accident, human error, or machine failure approaches mathematical certainty.

Nothing has occurred to improve the situation since the nuclear test ban agreement in 1958. No constructive steps have been taken to maintain the rough stability marked by that agreement—rather have all events tended to undermine it. Mutual fear and distrust have grown to the extent that settlement of major differences by negotiation appears impossible. Equally important and dangerous, the development of this highly charged emotional atmosphere could easily produce an irrational reaction to provocation, accidental or intentional.

To many observers, the major portion of the blame for this hideous state of affairs belongs to the United States and

not to the Soviet Union. As regards nuclear war the Russians seem always to have acted with due respect for the facts, with some semblance of sincerity, and with considerable restraint. In contrast, it appears the Americans have never been completely realistic, have often been insincere, and have thruout been dominated by an insane obsession.

It was only to be expected that the Soviets would strive to acquire a nuclear striking force. It took them 13 long years to do so. Having achieved their goal in 1958, they were satisfied with a modest force and willing to devote the bulk of their efforts to other endeavors, leaving numerical superiority to the United States. On some such lines they agreed to the nuclear test ban, perhaps with the hope it would slow down United States nuclear expansion.

Penetration of Iron Curtain secrecy during the following two years was highly important. It cheered the Americans with the unexpected news there was no missile gap—the United States was way ahead of the Soviet Union in all aspects of strategic force. But it alarmed the Russians—for with their small strategic force partially exposed, the effectiveness of their minimum deterrence was severely reduced.

Khrushchev appealed to the United Nations for nuclear disarmament—The United States insincerely countered by requiring as a necessary condition to any test ban or disarmament the one thing they knew the Russians could not accept—an elaborate inspection system. Khrushchev warned that if the West continued to dilly-dally over disarmament, the Soviet Union would be forced into massive re-armament. The United States beat him to the punch by stepping up its own armament.

The United States is a war monger when it openly proclaims the aggressive capabilities of its nuclear armament. Since the boast is well founded, the Soviet Union and the rest of the world have every right to be scared sick.

In handing over the control of its increasing number of nuclear weapons to more and more individuals including those in foreign nations like NATO and now Canada, the

United States is acting in reckless abandon and complete disregard of the catastrophic hazards involved.

Finally, for the United States to negotiate for disarmament with one hand, while with the other it pours tens of billions of dollars into new armaments which would be junked if its negotiations succeeded, can appear only as the epitome of stupidity, insincerity or both.

CONCLUSIONS

In conclusion, again there are no simple pat answers. The problem of thermo-nuclear war has grown too complex to be solved in a year, or a decade, or even a generation—assuming of course, there is no cataclysm.

Hopefully, there are some elementary actions we can take, both as individuals and as a nation, which might ease international tensions, lessen the extreme hazards, and eventually open up a path leading to permanent stability.

As individuals, we should abandon our shoulder shrugging, why bother, attitude. We must bother—the problem holds our lives at stake—and if we continue to abjectly turn over such matters to the government for handling, we are emulating what we object to most strongly in the Communists, and are but puppets of a totalitarian state.

As a nation, we must abandon our mania for weapons—the insane fixation that the answer to the problems posed by nuclear weapons is always more and more such weapons. The present comparative sizes of the two nuclear arsenals are such that were the positions of the United States and the Soviet Union reversed, we would have every reason for panic. Can we wonder that they are somewhat frightened—or that they feel it necessary to partially duplicate our frenzied efforts to pile up more and more?

Before World War II, an English philosopher sagely observed concerning another arms race—

“If, as they maintain, the best way to preserve peace is to prepare for war, it is not altogether clear why all nations should regard the armaments of other nations as a threat to peace. However, they do so regard them and

are accordingly stimulated to increase their own armaments to overtop the armaments by which they conceive themselves to be threatened."

To stop our nuclear arms race, we should announce an immediate cut back in all nuclear and missile production, curtailing all such activities as rapidly as economically feasible. Expansion of conventional forces should continue, and even be increased—but nuclear enhancement cease. Since we already have better than a four to one nuclear superiority, our national security would not be endangered.

As our conventional forces are increased, we should gradually recall all tactical nuclear weapons now outside our borders, taking them away from NATO and our own troops operating on foreign soil. We should dismantle our missile sites in Turkey, Italy and other similar countries on the periphery of Russia. We should let it be known we will not furnish nuclear warheads to any other nation.

In short, we should reduce by a considerable amount the nuclear pressure we now exert on the Soviet Union, and give them every possible incentive to cut back on their own nuclear production.

To continue negotiations for test bans and nuclear disarmament under the present conditions of suspicion and distrust can only promote more bad feeling on both sides. We should therefore drop out of such negotiations immediately. This will cost nothing for the issue of test bans is no longer of any importance, and the present chances of any disarmament agreement are practically nil.

It is questionable whether total nuclear disarmament will ever be desirable in the foreseeable future. Partial nuclear disarmament is extremely desirable, so negotiations to that end should be undertaken as soon as we have demonstrated our sincerity by our actions, and the Russians have lost enough of their fear to be willing to seriously consider the reduction of their nuclear armament. Were we in their shoes with the present disparity we wouldn't even think of reducing—why should they?

Lastly we should divert sizeable portions of our vast operations research from war to peace. In cold blood, if you like,

we must face up to the fact we cannot destroy the Communist people without being irreparably damaged ourselves. Like it or not, we must find ways and means to live with them, and as peacefully as possible. Thus the same careful and thorough exploration we have been extending for two decades to every suggestion for improving our conduct in war, should now be given to any idea which might promote or help to maintain the conditions of peace.

The problem of thermo-nuclear war has never been in the weapons themselves, but always in the people who might use the weapons—so it is in people and the relations among them, that answers must be found.